OCCUPATIONAL THERAPY SPECIALTY COURSE

91W-N3
Pre-Study Guide

Left click anywhere on this screen to continue

Pre-Study Guide For Occupational Therapy

INTRODUCTION

The Occupational Therapy Specialist course is extremely fast paced. This is an interactive study guide, and is designed to use both audio and visual aids to assist with learning.

Hopefully this study guide will assist students in assessing their Occupational Therapy knowledge, prior to arriving for the class. Most of the study guide deals with neurology and anatomy, and touching on other areas of the OT field.

You will have to determine if there are any additional

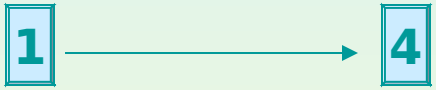
Left click anywhere on this screen to continue

Instructional guide for using the Pre-study Disc

MENU

Directory

Left arrow takes you back to previous slide, and right arrow takes you to next slide.



Select a number 1-4 to study indicated area.

?

Will take you to a particular section.

Knowledge Check: Quiz

Quizzes

Exit the Program

Ends show

Left click anywhere on this screen to continue

PRESTUDY GUIDE: MAIN DIRECTORY

Click audio

ANATOMY AND KINESIOLOGY I

ANATOMY AND KINESIOLOGY II

MEDICAL LECTURES

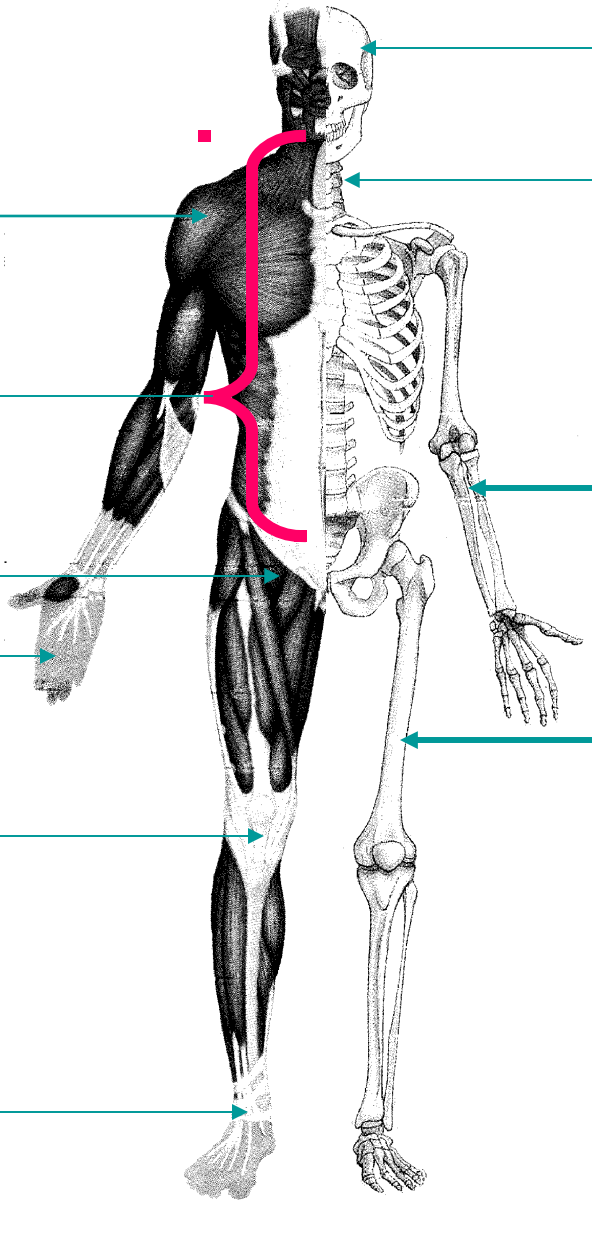
REHABILITATION

OCCUPATIONAL THERAPY PROCEDURES

Exit the Program

A&P II: Muscle Menu

Click audio



Shoulder

Back/Neck/Thoracic/Abdomen

Hip

Hand/Wrist/Forearm

Knee

Ankle

Skull and Vertebral column

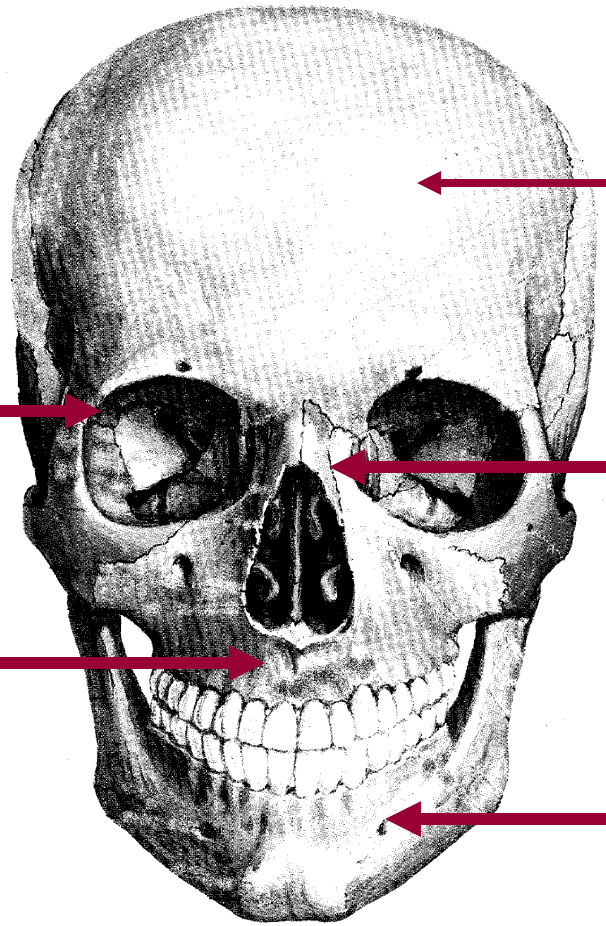
Upper Extremity

Lower Extremity

MAIN DIRECTORY

Knowledge Check: Qui

Skull



Frontal Bone

Orbits

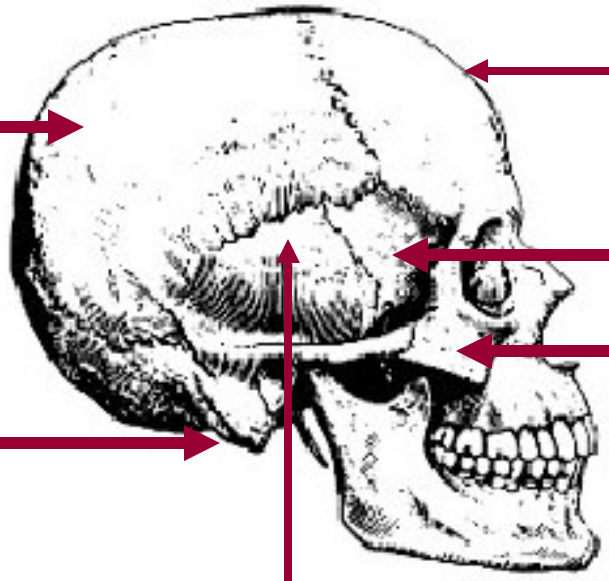
Nasal bone

Maxilla

Mandible

MENU

Skull/Lateral View



Parietal Bone

Frontal Bone

Sphenoid bone

Mastoid process

Zygomatic bone

Temporal Bone

MENU

SPINAL COLUMN

Cervical: C1-C7

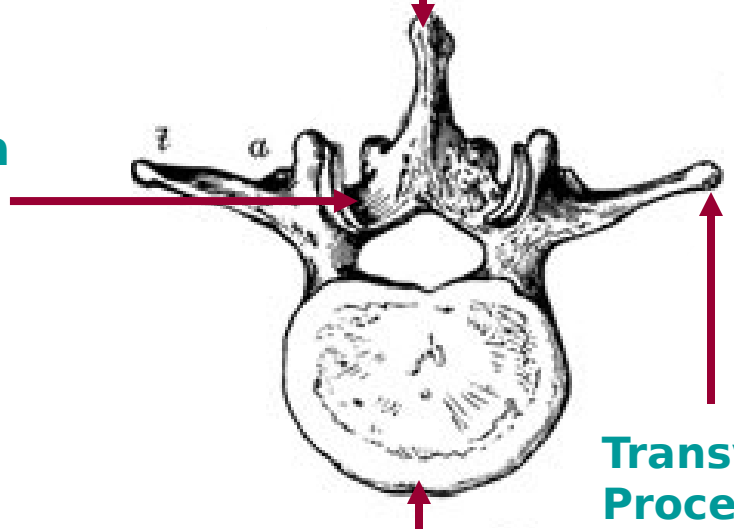
Thoracic: T1-T12

Lumbar: L1-L5

Sacrum: S1-S5

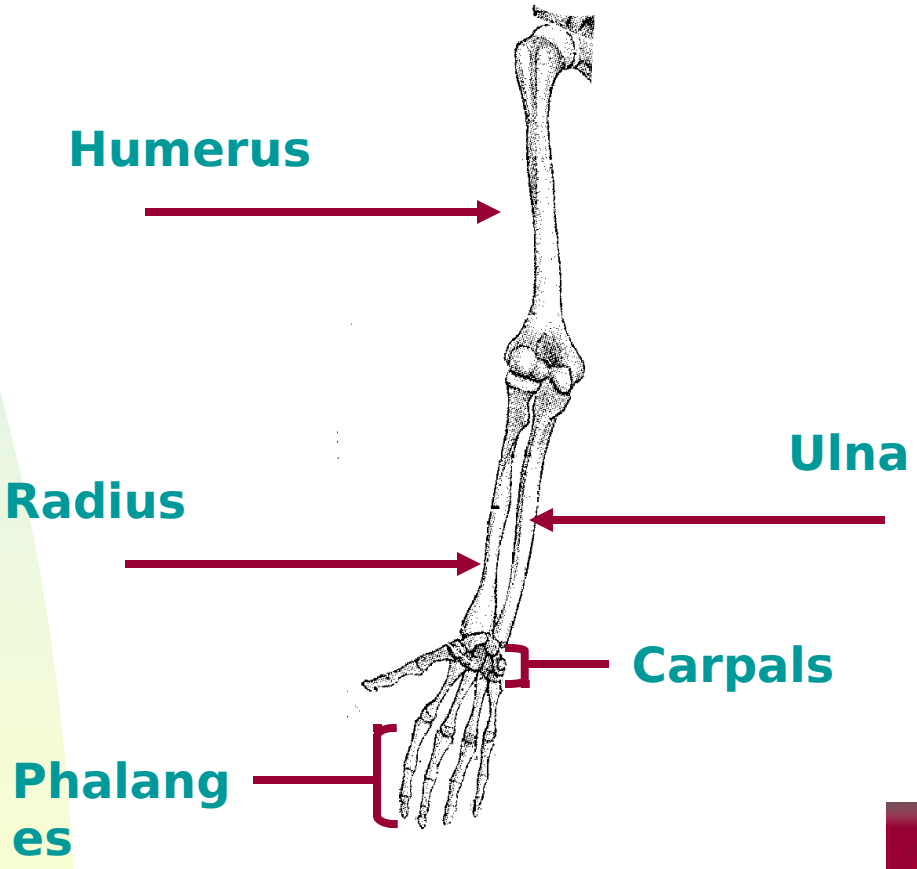
Coccyx:3-5 fused

Total: 33 vertebrae



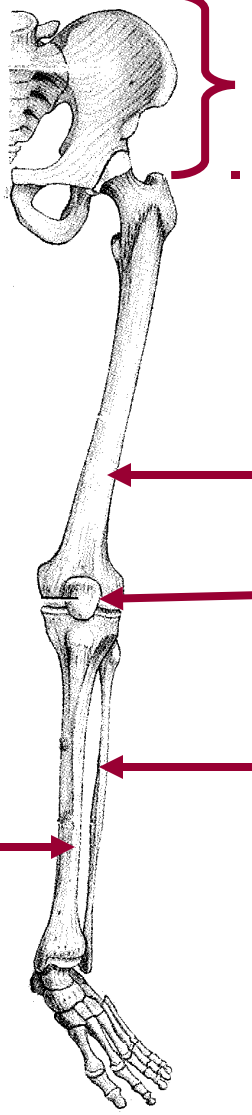
MENU

Upper Extremity



MENU

Lower Extremity



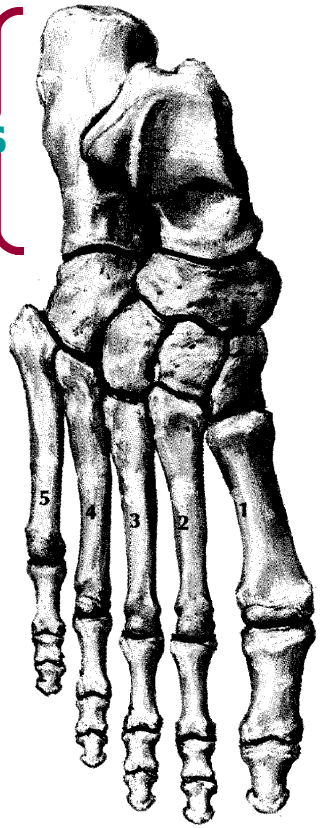
Pelvis

Femur

Patella

Fibula

Tibia



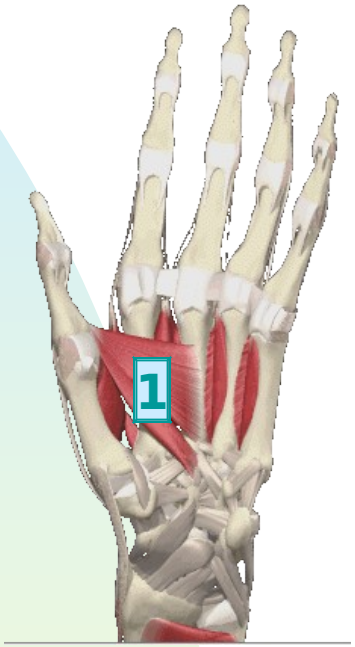
Calcaneus

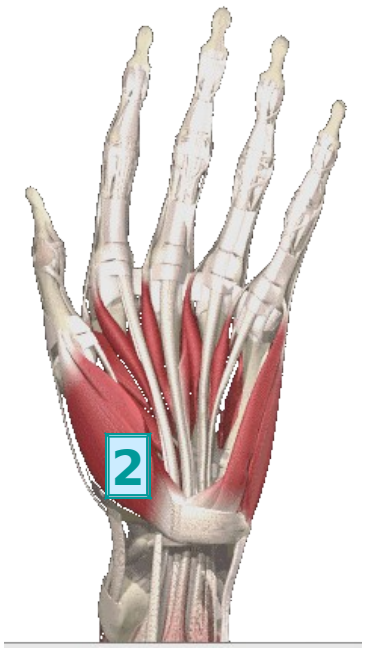
Metatarsals

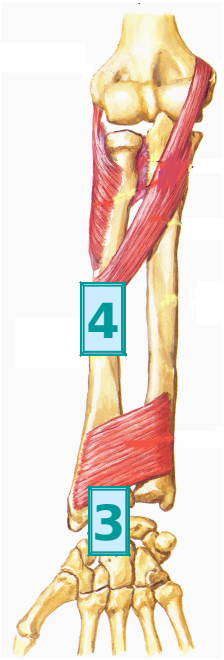
Tarsals

MENU

Hand Muscles Menu



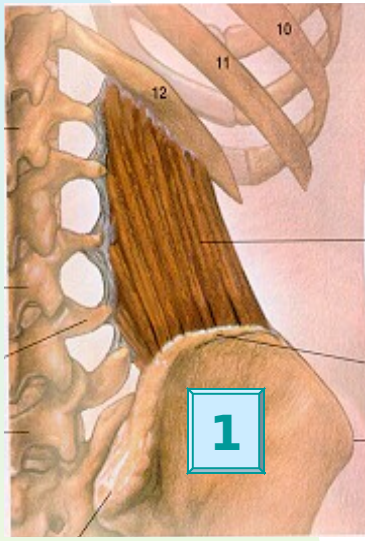


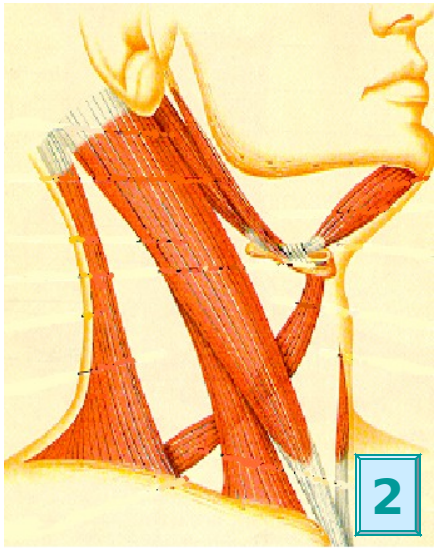


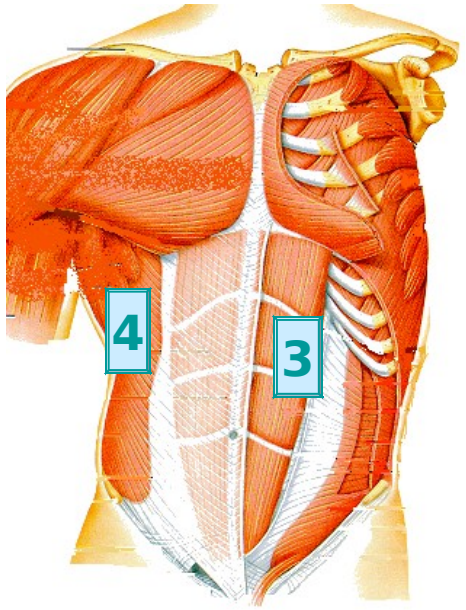
Click audio.

MENU

Neck and Thoracic Muscles Menu



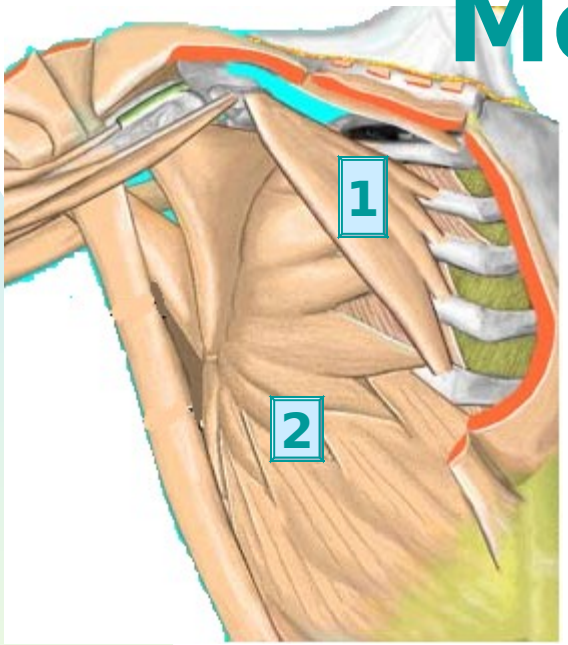


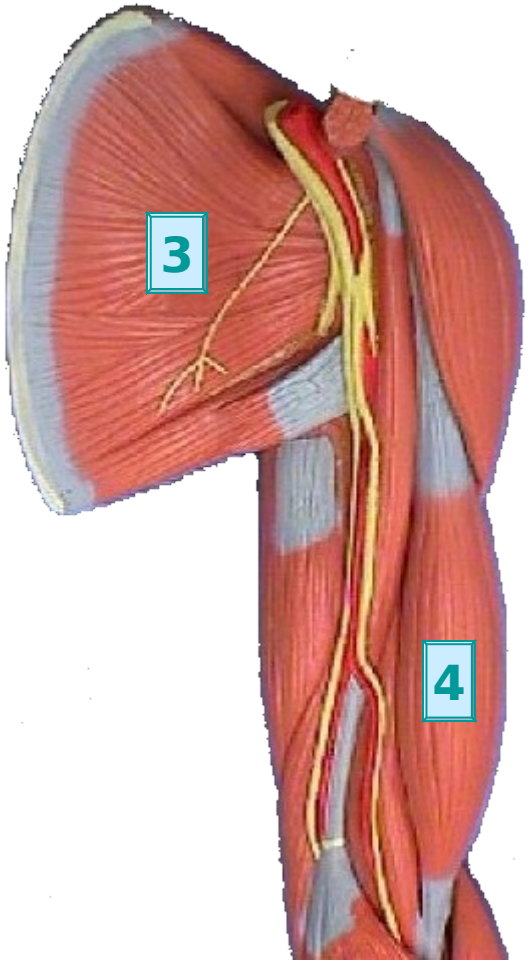


Click audio.

MENU

Shoulder Muscles Menu

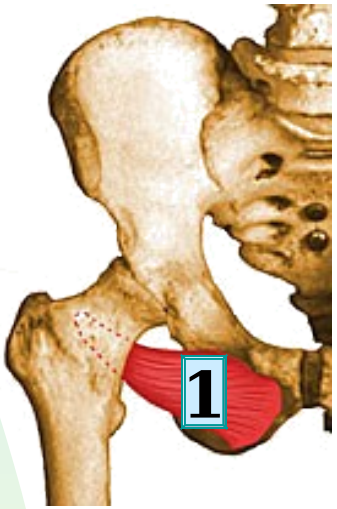


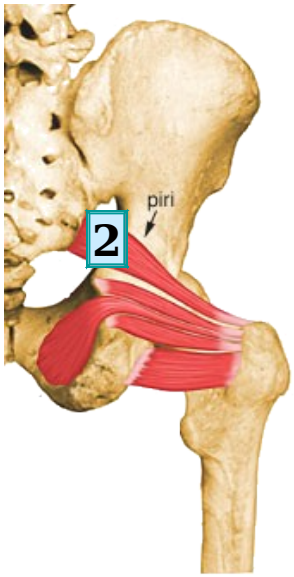


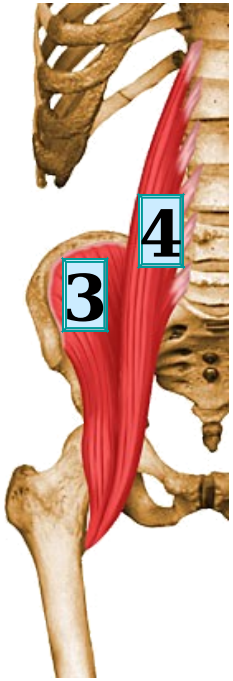
Click audio.

MENU

Hip Muscles Menu



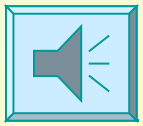




Click audio.

MENU

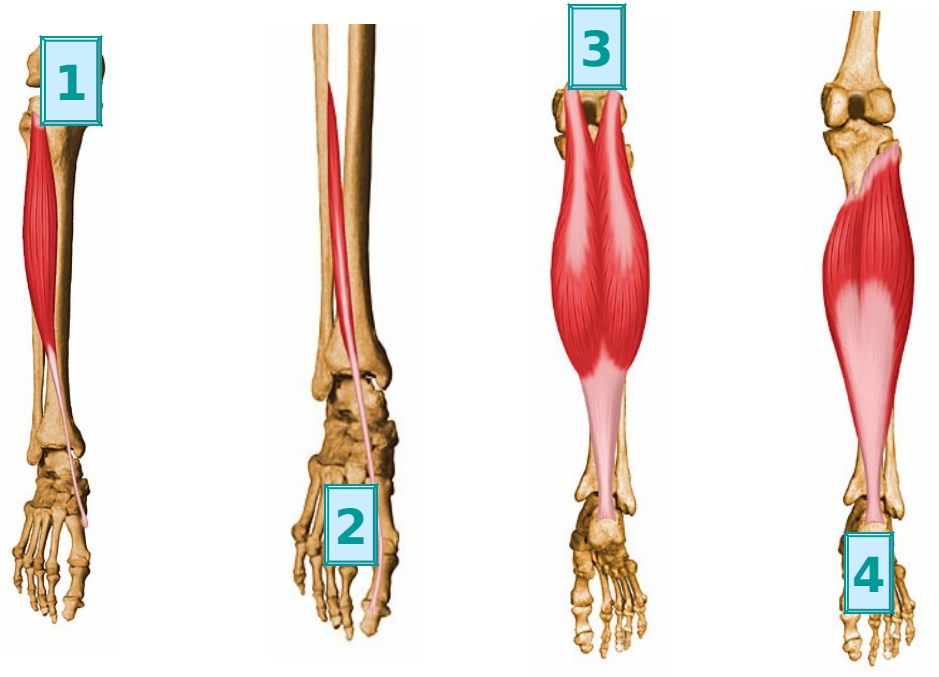
Knee Muscles Menu



Click audio.

MENU

Ankle Muscles Menu

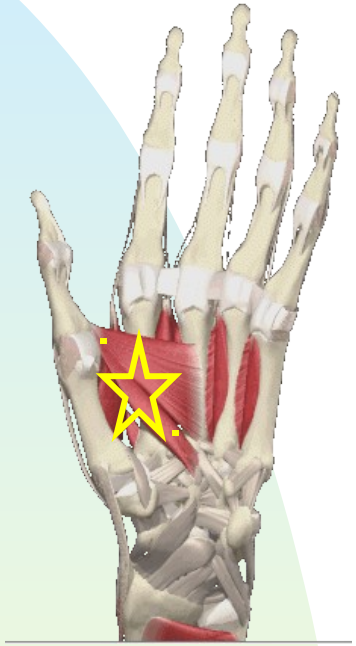


Click audio.

MENU

Adductor

click audio



Star indicates correct muscle

Adductor Pollicis

Origin: base of the shaft of the 2 & 3rd metacarpal

Insertion: medial side of the base of the 1st proximal digit.

Innervation: Ulnar Nerve

Action: adducts thumb

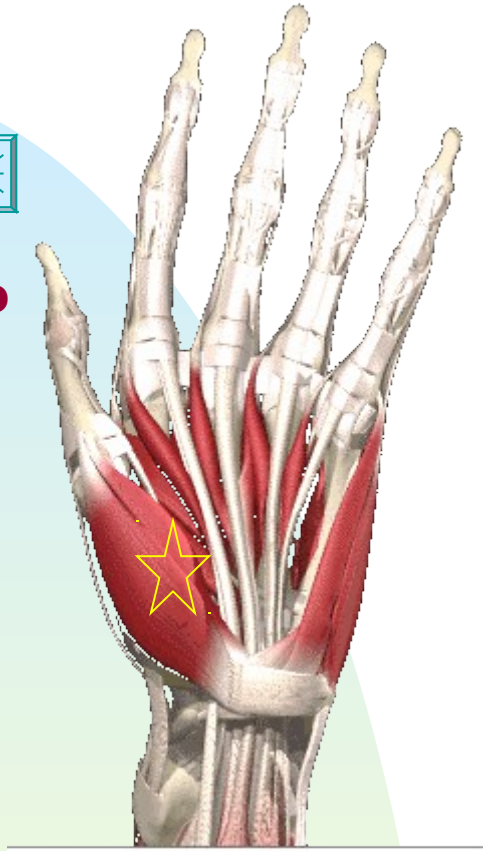
click right arrow for next hand muscle.

Hand Menu

MENU

Abductor

click audio



Star indicates correct muscle

Abductor Pollicis Brevis

Origin: transverse carpal ligament.

Insertion: lateral side of the base of the proximal phalanx of the 1st digit.

Innervation: median Nerve

Action: Abducts the 1st digit at the MCP joint.

Hand Menu

MENU

Pronator

click audio

Star indicates correct muscle

Pronator Quadratus

Origin: Medial lower 4th of the ulna.

Insertion: Lateral lower 4th of the radius

Innervation: Median Nerve

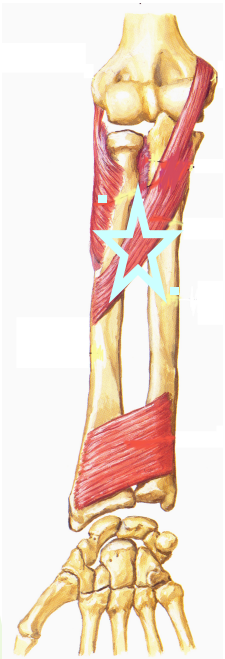
Action: Pronation- Pulls radius over the ulna

Hand Menu

MENU

Pronator

click audio



Star indicates correct muscle

Pronator Teres

Origin: Humeral head - superior portion of medial condyle,

Ulnar head - Coronoid process of ulna

Insertion: Anterior lateral portion of the mid shaft of the radius

Innervation: median Nerve

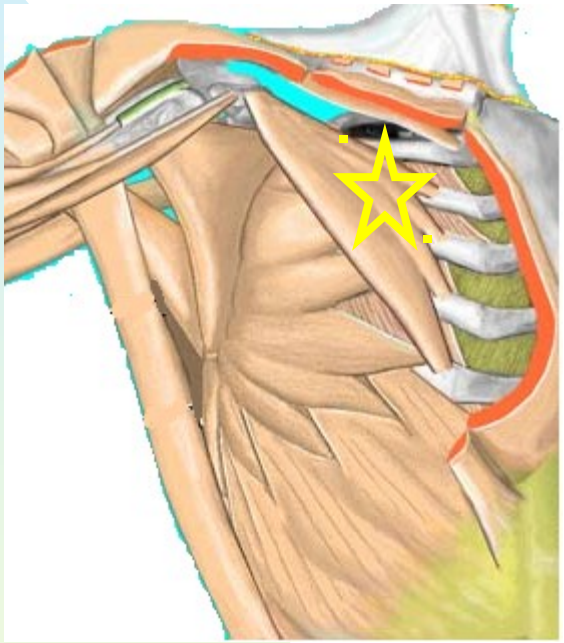
Action: Pronation - pulls radius over the ulna

Hand Menu

MENU

Shoulder Muscles

click audio



Star indicates correct muscle

Pectoarlis Minor

Origin: Ribs 3-5

Insertion: Coracoid process

Innervation: Medial pectoral nerve

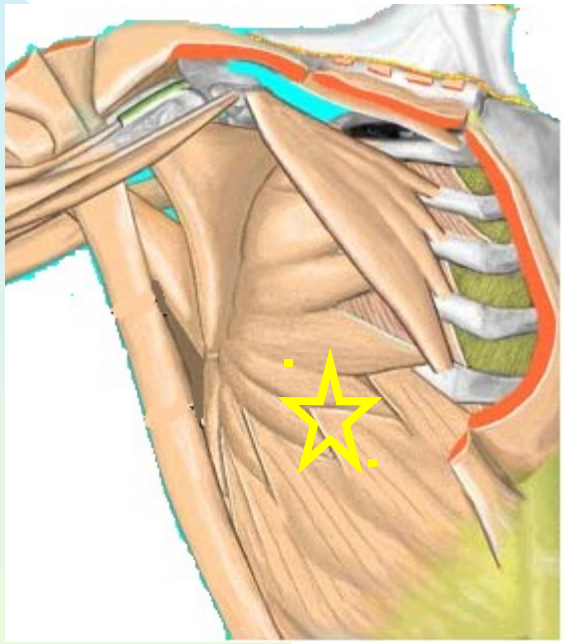
Action: Depression and downward rotation of scapula.

Shoulder menu

MENU

Shoulder Muscles

click audio



Star indicates correct muscle

Serratus Anterior

Origin: Ribs 1-9

Insertion: Vertebral border and inferior angle of scapula.

Innervation: Long thoracic

Action: Protraction and upward rotation of scapula; stabilizes scapula to the thoracic

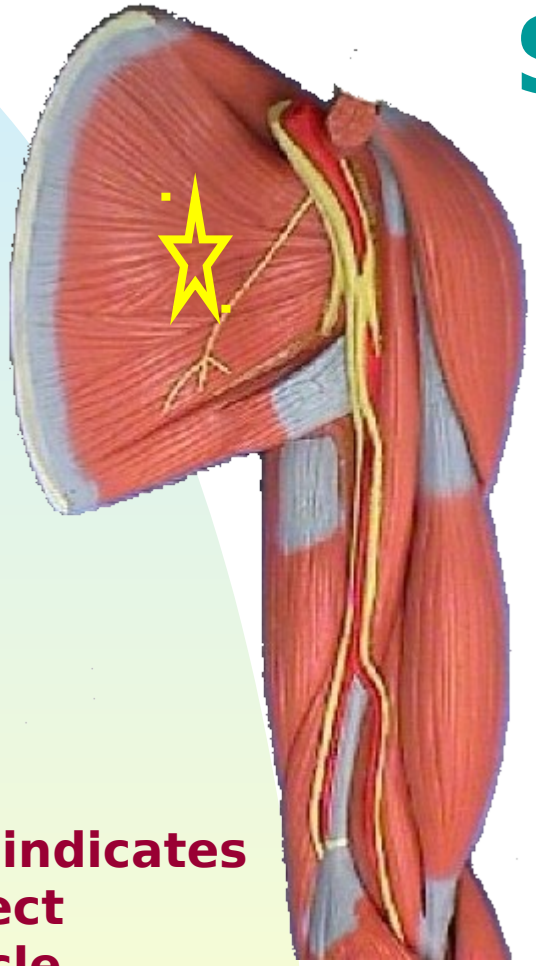
Shoulder menu

click right arrow for next shoulder muscle.

MENU

Rotator of the Shoulder

click audio



Subscapular is

Origin: Subscapular fossa

Insertion: Lesser tubercle

Innervation: Subscapular

Action: Internal rotation; Stabilizes GH joint

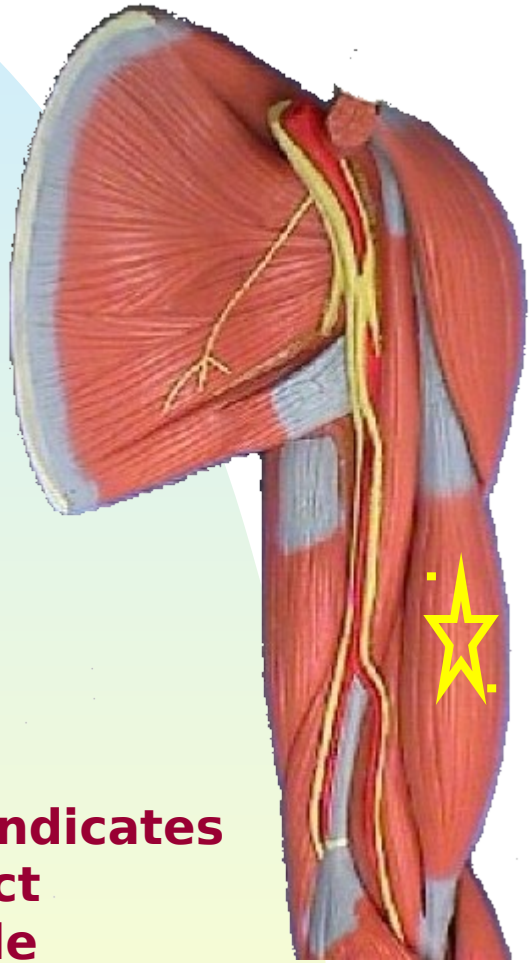
Star indicates correct muscle

Shoulder menu

MENU

Shoulder Flexor

click audio



Star indicates correct muscle

Biceps Brachii

Origin: LH-Supraglenoid tubercle

SH-Coracoid process

Insertion: Radial tuberosity

Innervation: Musculocutaneus

Action: Shoulder and elbow flexion; forearm supination at elbow.

Shoulder menu

MENU

External hip rotation

click audio

Star indicates correct muscle

Obturator Externus

Origin: Outer surface of obturator membrane.

Insertion: Deep depression below the greater trochanter

Innervation: Obturator nerve

Action: External rotation

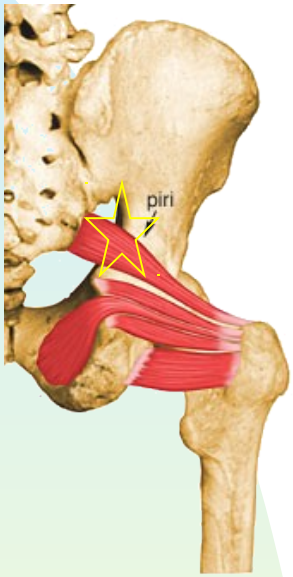
click right arrow for next hip muscle.

Hip Menu

MENU

External rotation / Abduction of hip

click audio



Star indicates correct muscle

Piriformis

Origin:: anterior sacrum.

Insertion: superior border of greater trochanter.

Innervation: sacral nerves

Action: External rotation

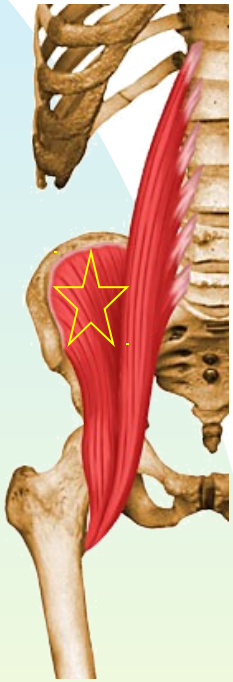
Abduction

Hip Menu

MENU

Anterior Compartment of Hip

click audio



Star indicates correct muscle

Hip Menu

Iliacus

Origin: Superior Iliac Fossa

Insertion: Tendon of the Psoas Major to the Lesser Trochanter

Innervation: Femoral

Action: Flexion of the hip,

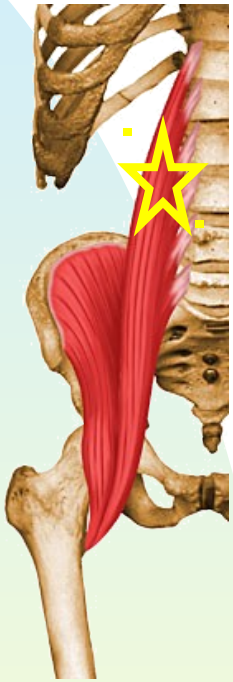
Flexion of lumbar spine,

External rotation

MENU

Second muscle of the Anterior Compartment of Hip

click audio



Star indicates correct muscle

Psoas Major

Origin: Vertebral bodies T12-L4

Transverse Processes L1-L4

Insertion: Lesser Trochanter

Innervation: Femoral

Action: Flexion of the hip,

Flexion of lumbar spine,

External rotation

Hip Menu

MENU

Posterior Knee

click audio

Star indicates correct muscle

Knee Menu

Biceps Femoris

Origin: LH: Ischial Tuberosity. SH: Linea Aspera

Insertion: Head of Fibula and lateral tibial condyle.

Innervation: Tibial /Common Peroneal

Action: Hip Extension, Knee Flexion

click right arrow for next knee muscle.

MENU

Second Posterior Knee Muscle

click audio

Star indicates correct muscle

Semitendinosis

Origin: Ischial Tuberosity

Insertion: Proximal/medial aspect of tibial shaft

Innervation: Tibial

Action: Hip Extension, Knee Flexion

Knee Menu

MENU

Anterior Knee Muscle

click audio

Star indicates correct muscle

Knee Menu

Rectus Femoris

Origin: Anterior inferior iliac spine, and superior rim of the acetabulum

Insertion: Tibial tuberosity via patellar ligament

Innervation: Femoral

Action: Hip flexion, Knee extension

MENU

Second Anterior Knee Muscle

click audio

Star indicates correct muscle

Sartorius

Origin: Anterior superior iliac spine

Insertion: Anterior medial surface of the tibia below medial condyle

Innervation: Femoral nerve

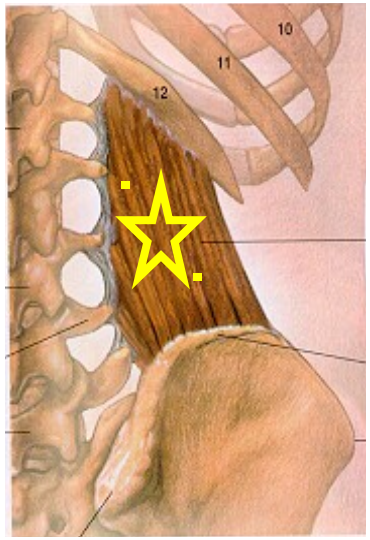
Action: Hip flexion and hip external rotation, Knee flexion

Knee Menu

MENU

Posterior Back Muscle

click audio



Star indicates correct muscle

Quadratus Lumborum

Origin: Iliac crest

Insertion: Transverse Process of L1-L4; 12th Rib.

Innervation: APR

Action: Elevates Pelvis, Lateral Flexion of spine, and stabilization of ribs with forced expiration.

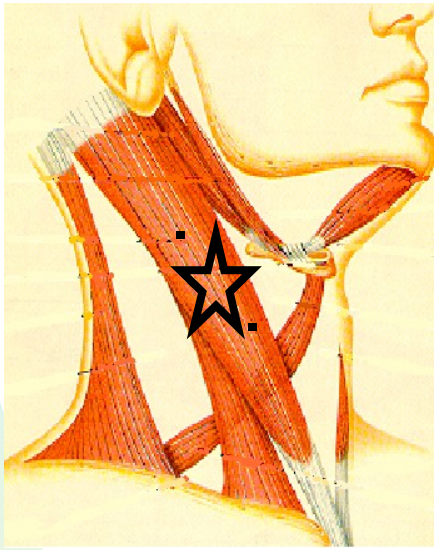
Neck/thoracic Menu

click right arrow for next neck/thoracic muscle.

MENU

Anterior Neck Muscle

click audio



Star indicates correct muscle

Sternocleidomastoid

Origin: Sternum, and medial 1/3 of clavicle

Insertion: Mastoid process

Innervation: 11 cranial/spinal accessory nerve

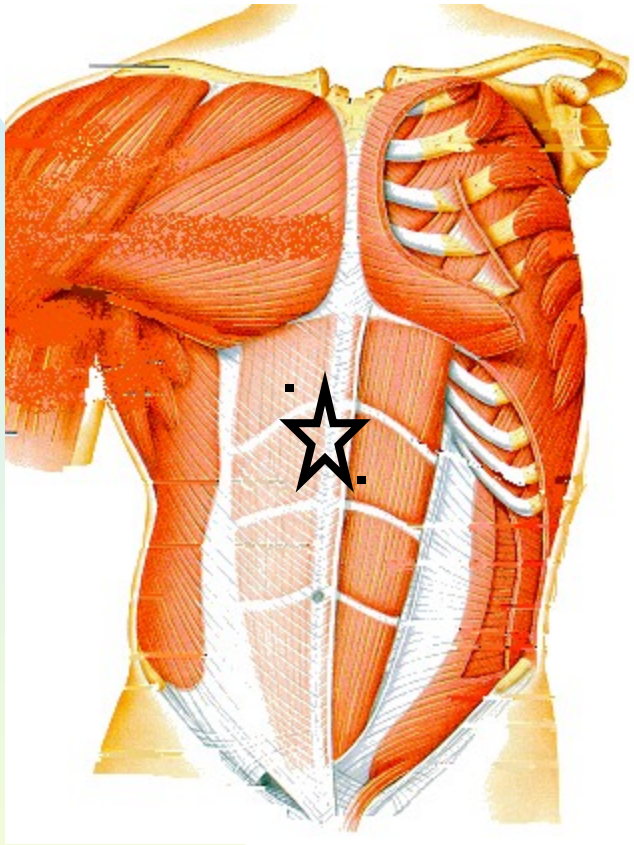
Action: Contralateral rotation of head, Ipsilateral side bend of head, working bilaterally they flex the head and neck

Neck/thoracic Menu

MENU

Abdominal Muscle

click audio



Star indicates correct muscle

Rectus Abdominis

Origin: Pubic Crest and pubic symphysis

Insertion: Costal cartilage of ribs 5-7, sternum, and xiphoid process.

Innervation: APR

Action: Flexion of thoracic & lumbar spine with resistance, increase abdominal pressure, posterior pelvic tilt, and assist with lateral flexion spine.

Neck/thoracic Menu

MENU

Abdominal Muscle

click audio

Star indicates correct muscle

External Obliques

Origin: Lower eight ribs

Insertion: Iliac crest and aponeurosis

Innervation: APR

Action: Increase abdominal pressure, contralateral rotation of trunk, and flexion or thoracic and lumbar spine.

Neck/thoracic Menu

MENU

Anterior Ankle Muscle

click audio

Star indicates correct muscle

Tibialis Anterior

Origin: Lateral condyle of the tibia, and interosseous membrane

Insertion: Base of the 1st metatarsal and 1st cuneiform.

Innervation: Deep Fibular

Action: Dorsiflexion and inversion of foot.

Ankle Menu

MENU

Anterior Ankle Muscle

click audio

Star indicates correct muscle

Extensor Hallucis Longus

Origin: Middle anterior fibula, and interosseous membrane

Insertion: Distal Phalanx of great toe

Innervation: Deep Fibular

Action: Dorsiflexion inversion of foot extends great toe.

Ankle Menu

MENU

Posterior Ankle Muscle

click audio

Star indicates correct muscle

Gastrocnemius

Origin: Posterior medial and lateral femoral condyles

Insertion: Posterior calcaneus via achilles tendon

Innervation: Tibial nerve

Action: Flexion of knee, plantar flexion of foot

Ankle Menu

MENU

Posterior Ankle Muscle

click audio

Star indicates correct muscle

Soleus

Origin: Upper posterior tibia and fibula

Insertion: Posterior calcaneus via achilles tendon

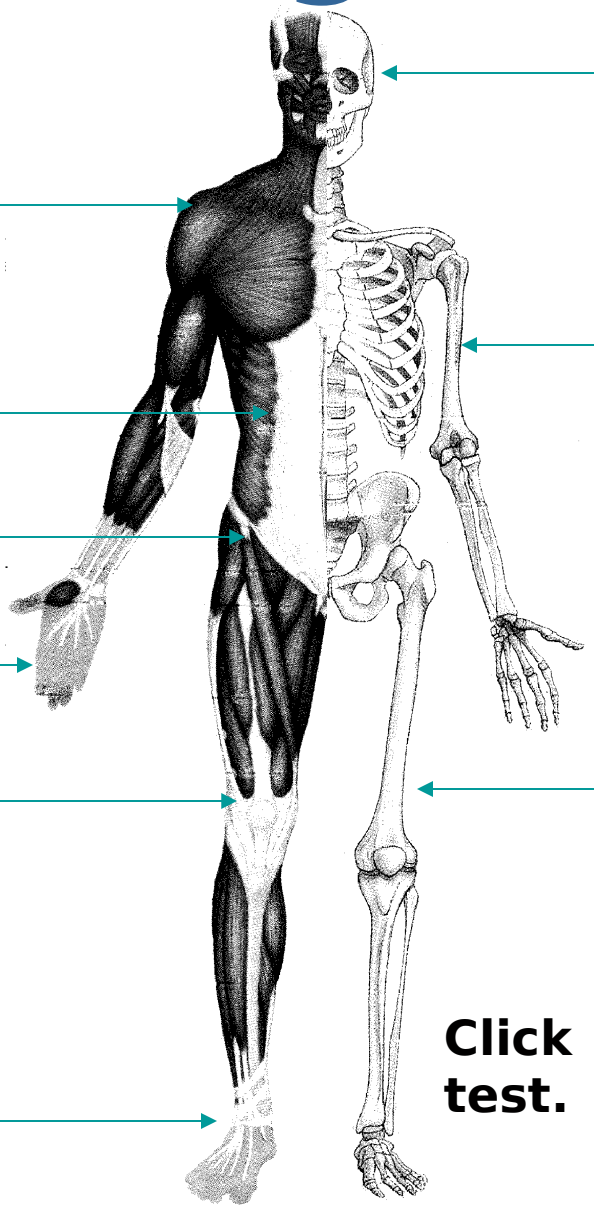
Innervation: Tibial nerve

Action: Plantarflexion of foot.

Ankle Menu

MENU

Knowledge Check



Skull/Spine

Shoulder

Upper Extremity

Thorax

Hip

Hand/Wrist

Lower Extremity

Knee

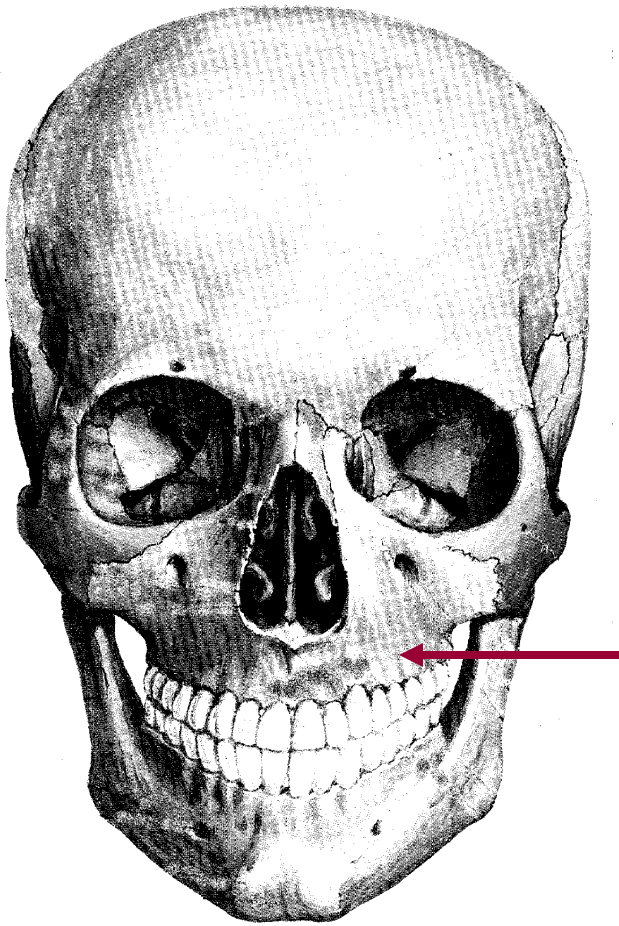
Ankle

Click the area you wish to test.

MENU

Quiz one: 1

Click the correct answer.



What is this bone?

A. Mandible

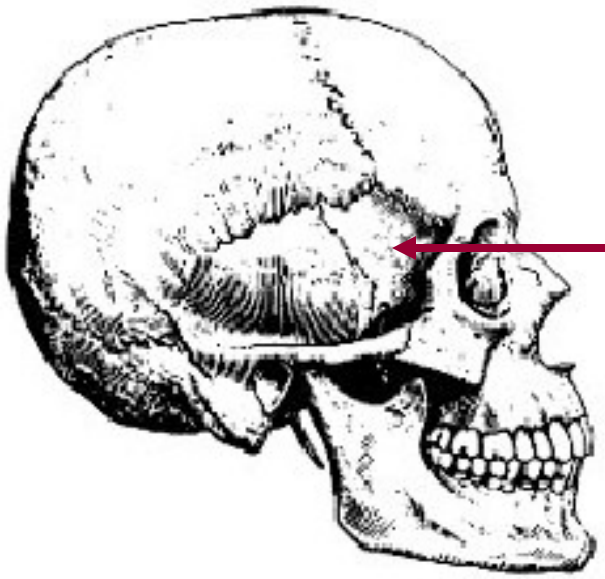
B. Maxilla

C. Frontal

Next question

Quiz one: 2

Click the correct answer.



What is this bone?

A. Parietal

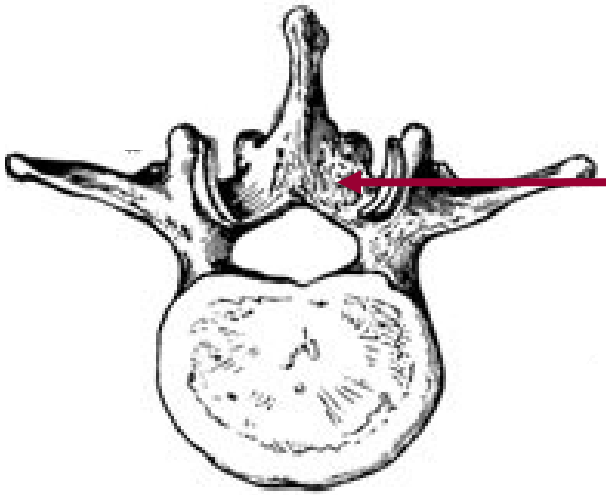
B. Zygomatic

C. Sphenoid

Next question

Quiz one: 3

Click the correct answer.



What is this?

A. Lamina

B. Spinous

C.Transverse

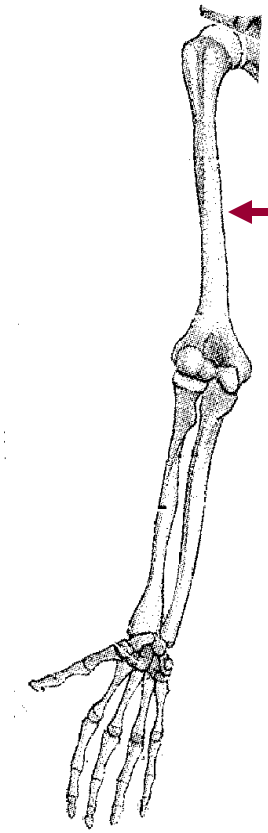
Quiz Two: 1

Click the correct answer.

A Humerus

B. Radius

C. Phalanges



What is this bone?

Next question

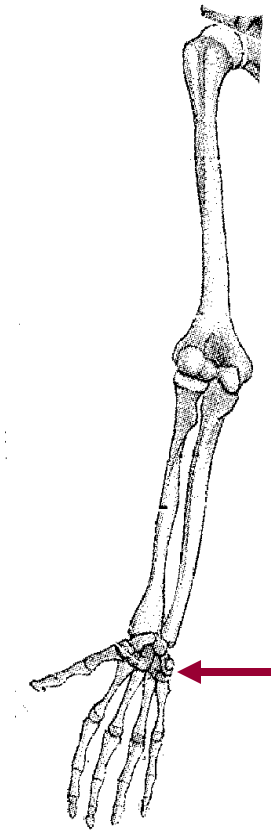
Quiz Two: 2

Click the correct answer.

A Phalanges

B. Ulna

C. Carpals



What is this?

Next question

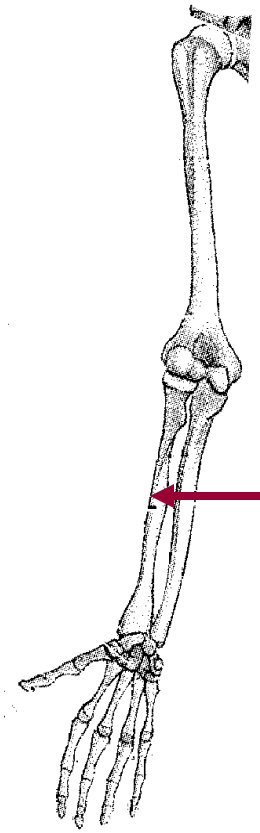
Quiz Two: 3

Click the correct answer.

A Radius

B. Ulna

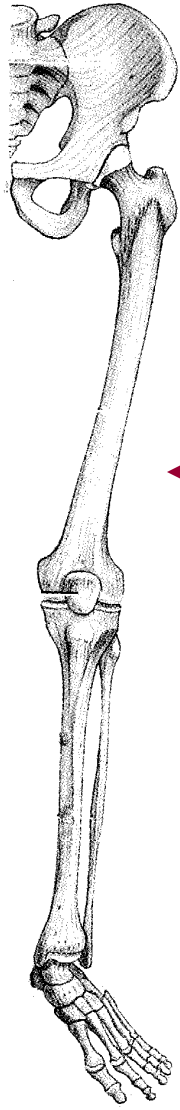
C. Carpals



What is this?

Quiz Three: 1

Click the correct answer.



What is this bone?

A Femur

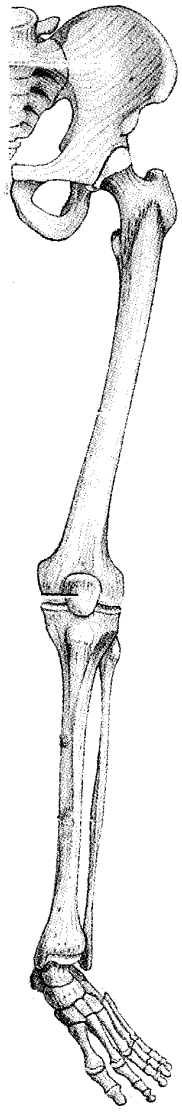
B. Tibia

C. Patella

Next question

Quiz Three: 2

What is this bone?



Click the correct answer.

A Femur

B. Tibia

C. Pelvis

Next question

Quiz Three: 3

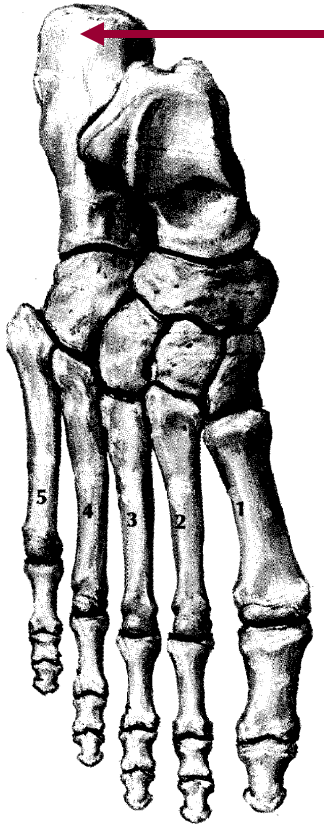
What is this bone?

Click the correct answer.

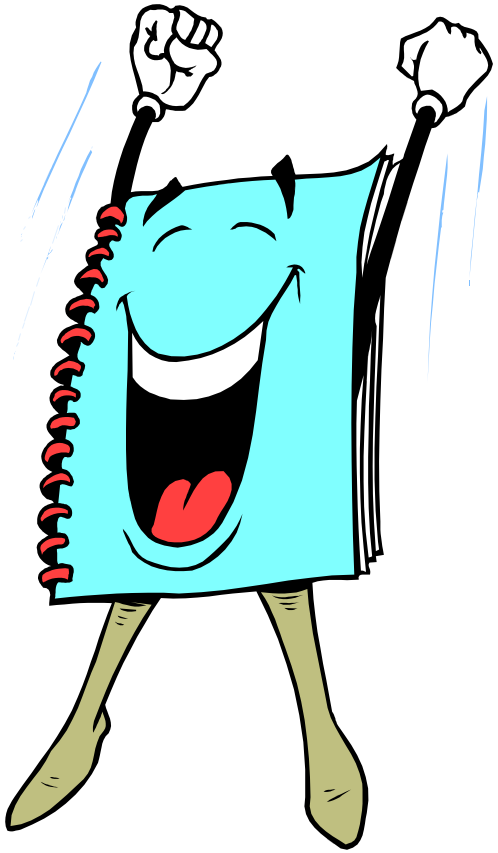
A. Metatarsals

B. Calcaneus

C. Phalanges



CONGRATULATIONS!!



Knowledge Menu

Exit the Program

Forearm/Hand Quiz: 1

What is the action of the abductor pollicis brevis?

A. Adducts the thumb

B. Abducts the thumb at the MCP joint

C. Abducts thumb at the DIP joint.

Click the correct answer.

Next question

Forearm/Hand Quiz: 2

Click the correct answer.

A. Pronator quadratus

B. Pronator teres

C. Abductor pollicis brevis

***W*hat is this muscle?**

Next question

Forearm/Hand Quiz: 3

What is the innervation of the adductor pollicis?

A. Radial

B. Median

C. Ulnar

Click the correct answer.

Shoulder Quiz: 1

Click the correct answer.

What Nerve innervates the serratus anterior?

A. Long Thoracic

B. Medial Pectoral

C. Subscapular

Next question

Shoulder Quiz: 2

Click the correct answer.

Which of the following muscles stabilizes the glenohumeral joint (GH)?

A. Biceps brachii

B. Pectoralis minor

C. Subscapularis

Next question

Shoulder Quiz: 3

Click the correct answer.

Which Muscle originates from ribs 3-5?

A. Subscapular

B. Pectoralis minor

C. Serratus Anterior

Neck and Thoracic Quiz: 1

Click the correct answer.

Which muscle elevates the pelvis?

A. Quadratus lumborum

B. Rectus Abdominis

C. External obliques

Next question

Neck and Thoracic Quiz: 2

Click the correct answer.

Which of the following is not innervated by the APR?

A. Quadratus lumborum

B. Sternalcleidomastoid

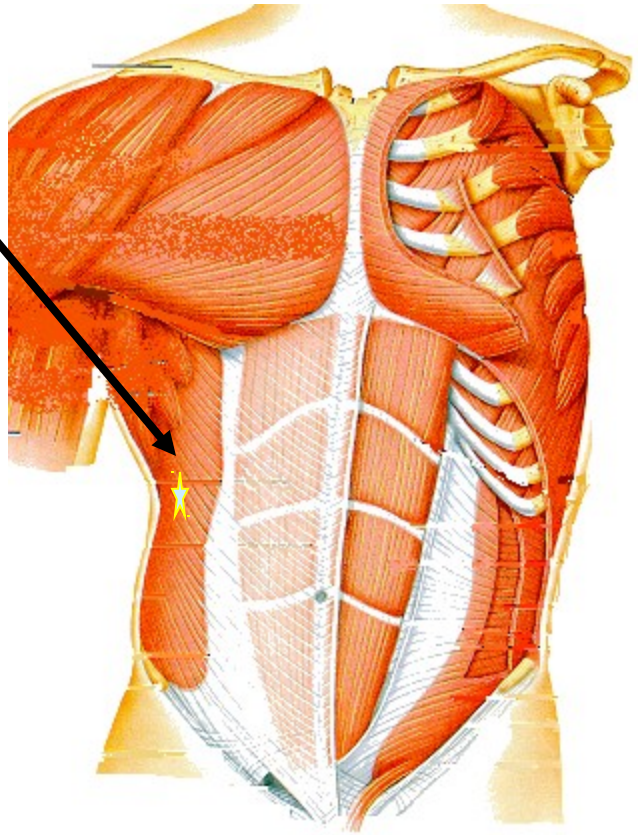
C. External obliques

Next question

Neck and Thoracic Quiz: 3

Click the correct answer.

What is the name of the muscle?



A. Quadratus lumborum

B. Rectus Abdominis

C. External obliques

Hip Quiz: 1

Click the correct answer.

Which of the following muscle originates off of the anterior sacrum?

A. Psoas Major

B. Obturator Externus

C. Piriformis

Next question

Hip Quiz: 2

Click the correct answer.

Which of the following muscle's only does external rotation of the hip.

A. Obturator externus

B. Iliacus

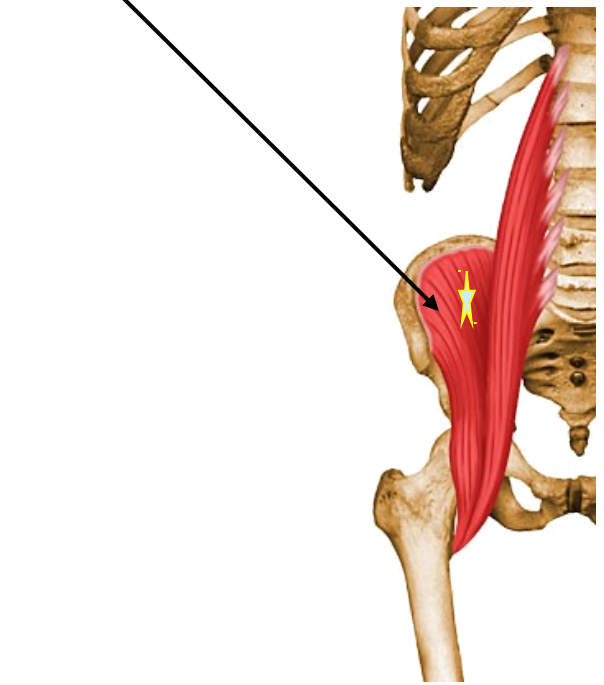
C. Piriformis

Next question

Hip Quiz: 3

What is this muscle?

Click the correct answer.



A. Iliacus

B. Obturator Externus

C. Piriformis

Knee Quiz: 1

Click the correct answer.

Which of the following knee muscles externally rotates the hip?

A. Sartorius

B. Rectus femoris

C. Semitendinosis

Next question

Knee Quiz: 2

Click the correct answer.

Which of the following muscles is innervated by two nerves?

A. Semitendinosis

B. Rectus femoris

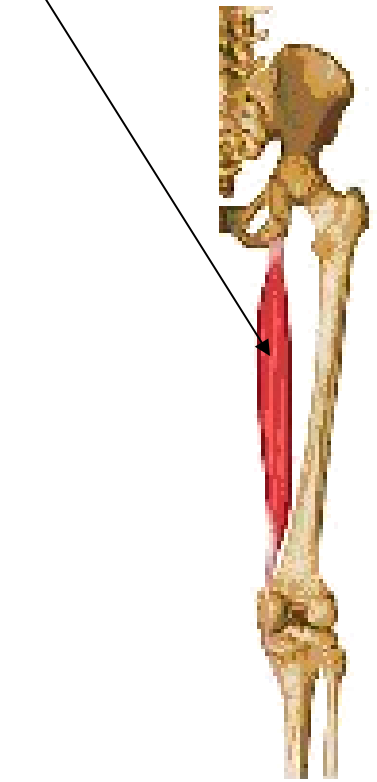
C. Biceps femoris

Next question

Knee Quiz: 3

What is this muscle

Click the correct answer.



A. Sartorius

B. Biceps femoris

C. Semitendinosis

Ankle Quiz: 1

Click the correct answer.

Which of the following ankle muscles flexes the knee?

A. Tibialis anterior

B. Soleus

C. Gastrocnemius

Next question

Ankle Quiz: 2

Click the correct answer.

Which muscle is innervated by the tibial nerve?

A. Soleus

B. Extensor hallucis longus

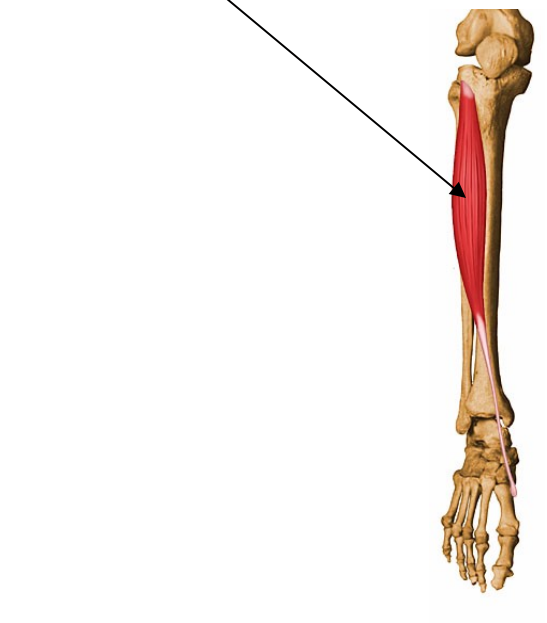
C. Tibialis anterior

Next question

Ankle Quiz: 3

What is this muscle?

Click the correct answer.



A. Soleus

B. Tibialis Anterior

C. Gastrocnemius

Introduction to the Nervous System

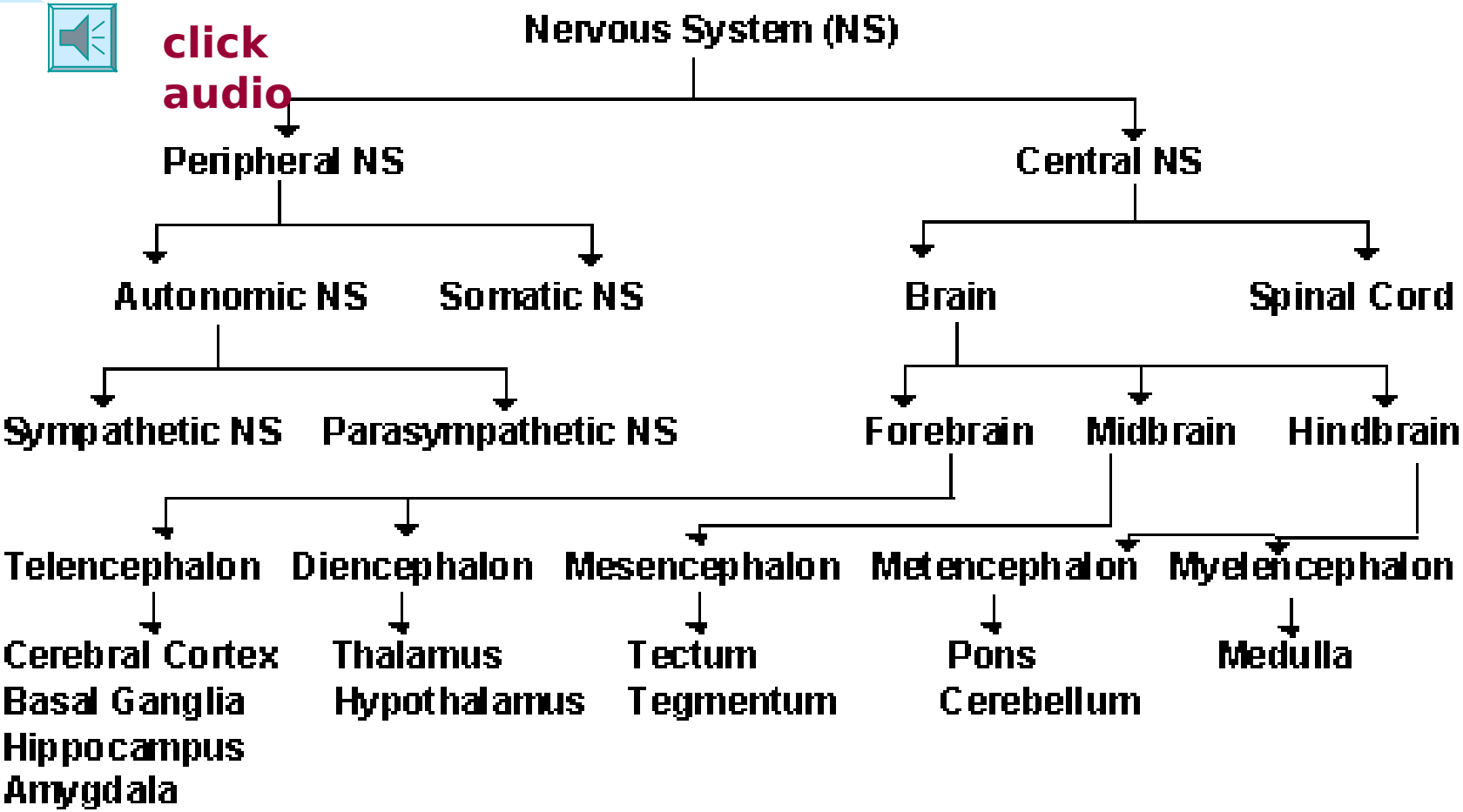
click audio

- Central: (CNS)
  - Made up of brain and spine
- Peripheral:
  - Somatic nervous system - Efferent neurons that conduct impulses to muscle tissue (Voluntary movement)
  - Autonomic nervous system - Efferent neurons that conduct involuntary actions (Sympathetic/Parasympathetic)

LEFT CLICK ANY WHERE ON THE SCREEN TO CONTINUE

Nervous System Flow Chart

click audio



LEFT CLICK ANY WHERE ON THE SCREEN TO CONTINUE

NEURON MENU

click audio

MENINGES

ARTERIES OF BRAIN

CEREBRUM

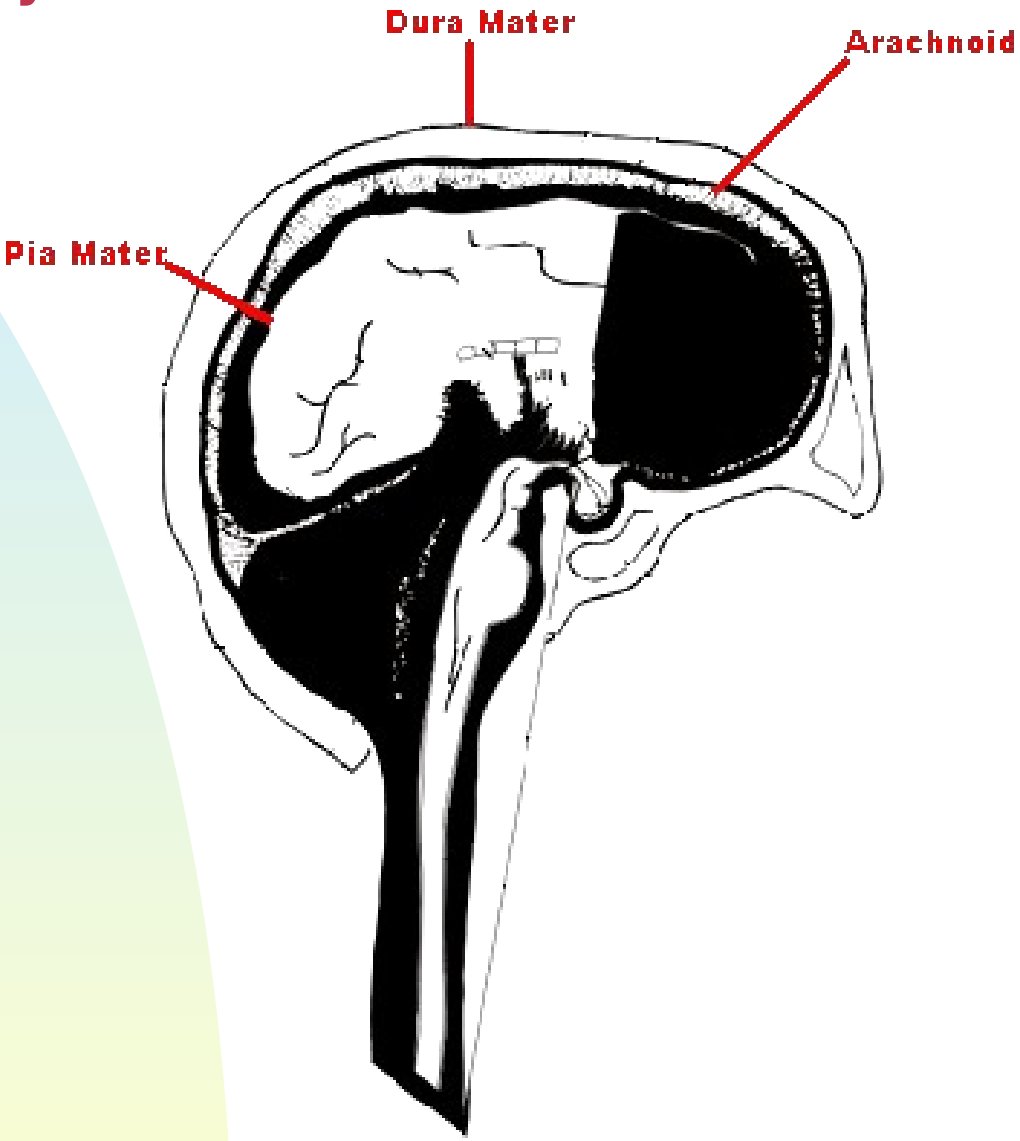
SPINAL CORD

THE NEURON

MAIN DIRECTORY

Select the area you wish to study.

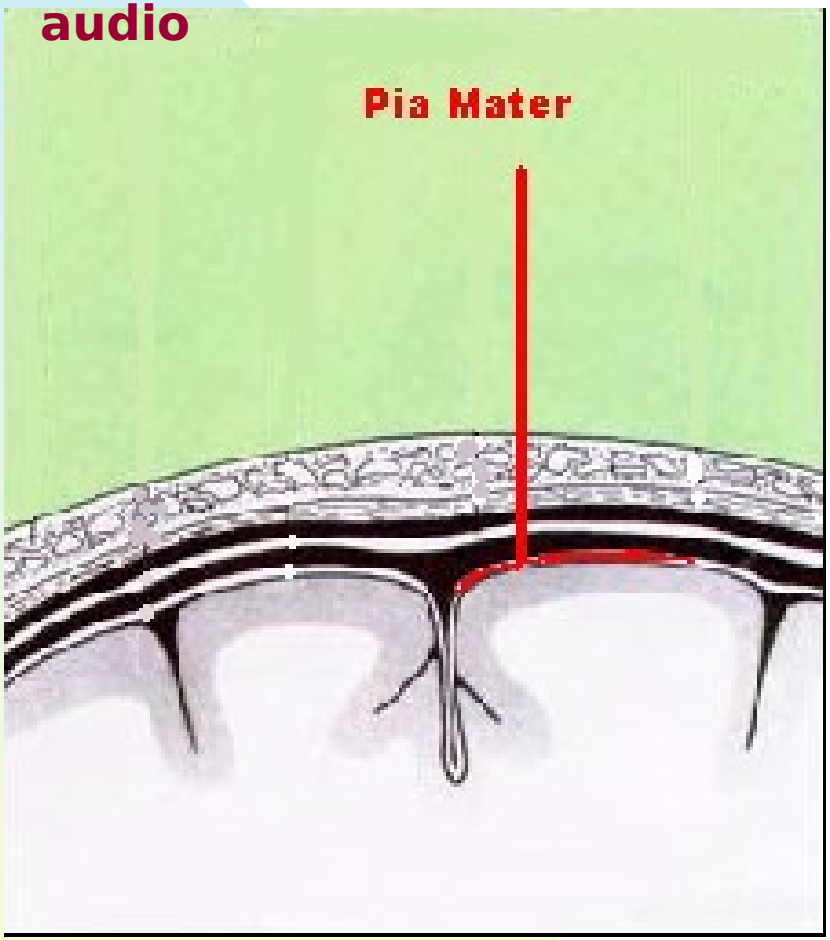
click audio



NEURO MENU

Pia Mater

click audio

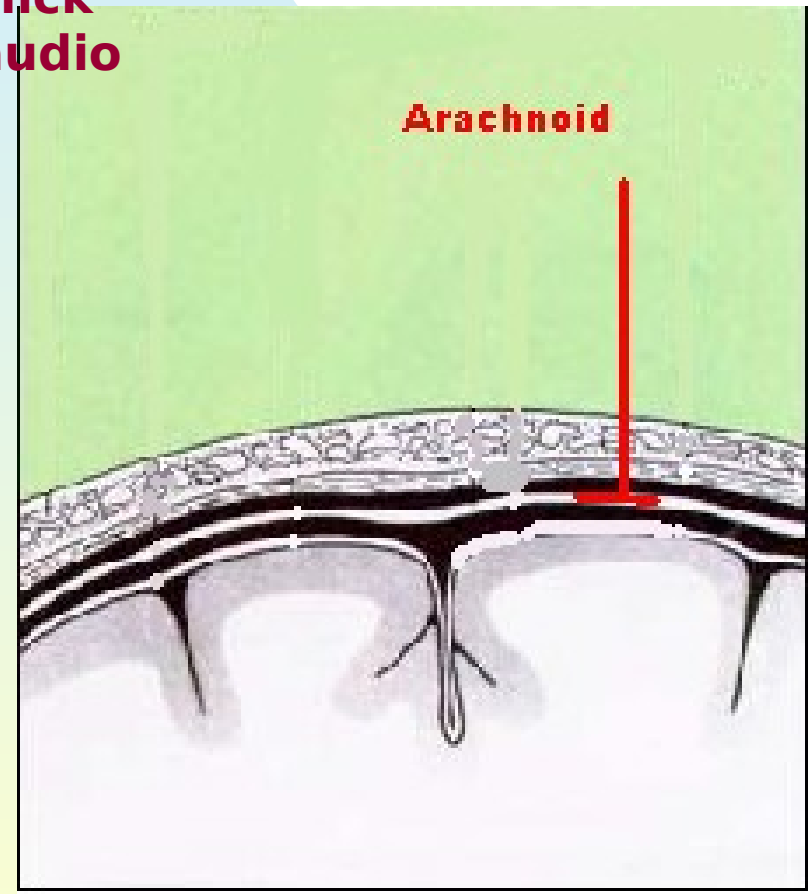


- Thin delicate membrane attached to the brain itself.

Meninges

Arachnoid

click audio



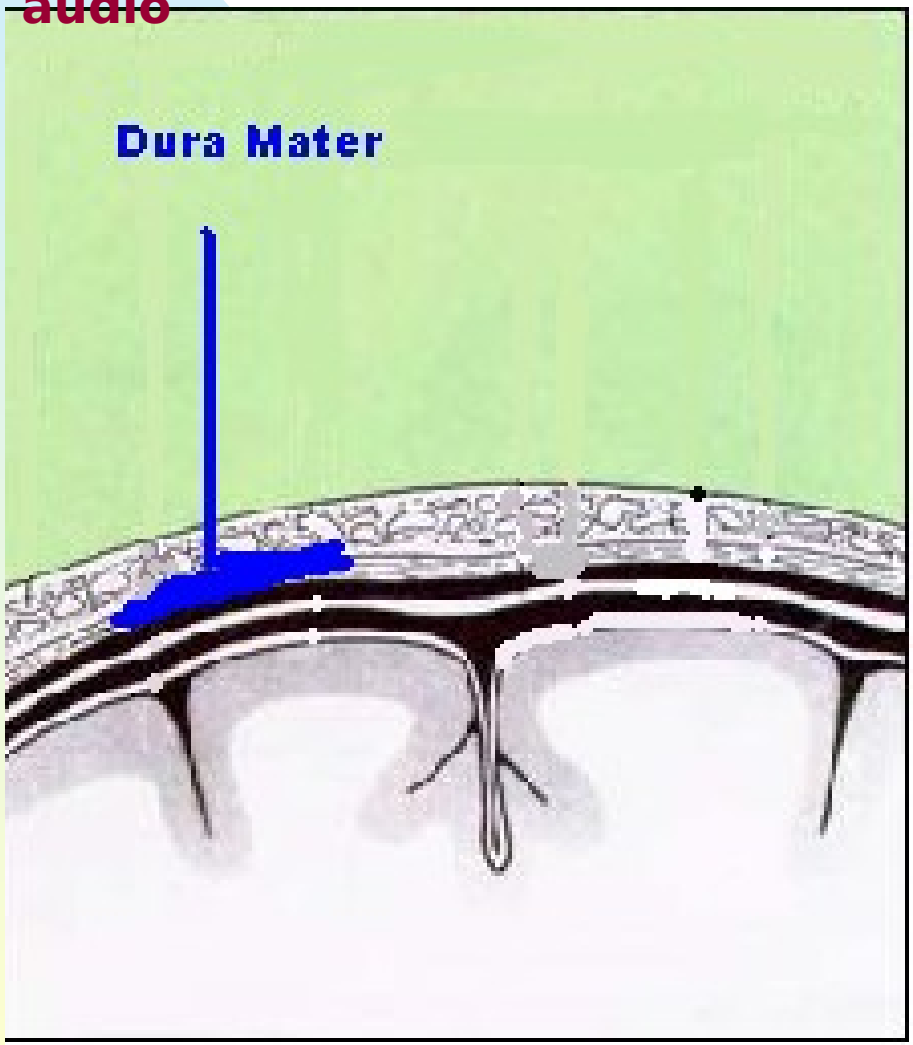
- Middle covering
- Lies directly under the dura mater.
- The space between the arachnoid and Pia filled with Cerebral spinous fluid.

* Cerebral spinal fluid nourishes, removes waste, and protects the brain against chemical or physical injury.

Meninges

Dura Mater

click audio



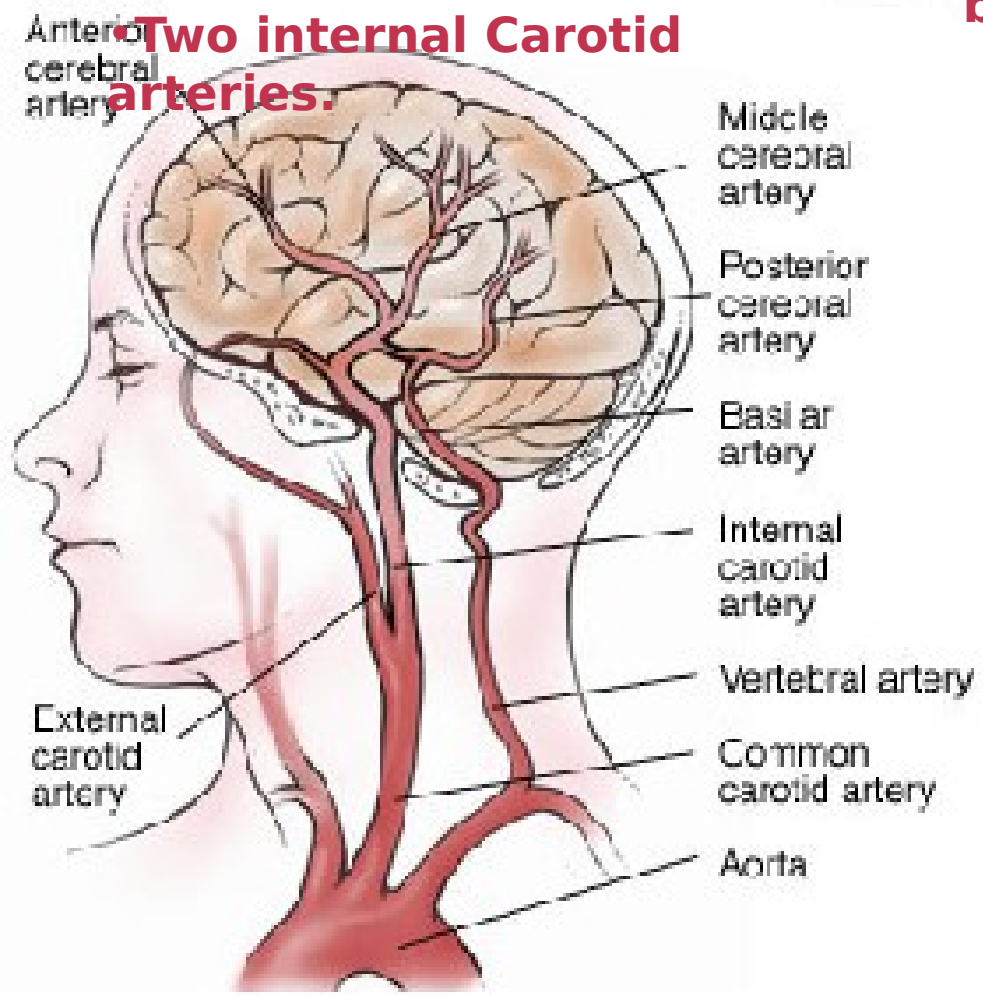
- Outer most covering of the brain.
- Thick, and attached to inner surface of the skull.

Meninges

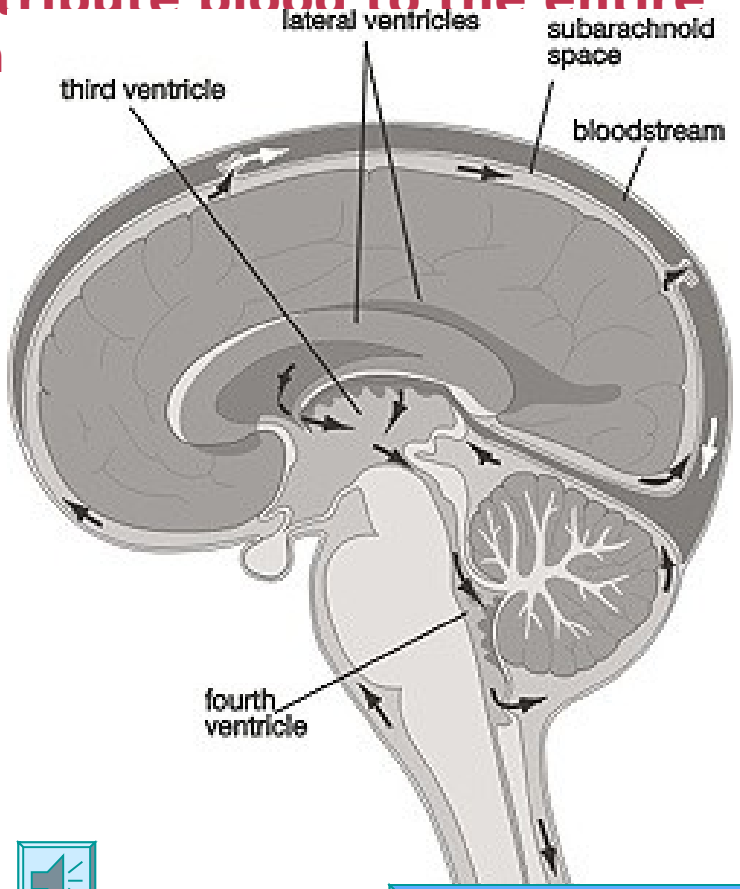
Blood Supply: Arteries

There are four major arteries that supply blood to the brain:

- Two Vertebral arteries
- Two internal Carotid arteries.



They all are interconnect to assure that if a blockage occurs the others will distribute blood to the entire bra



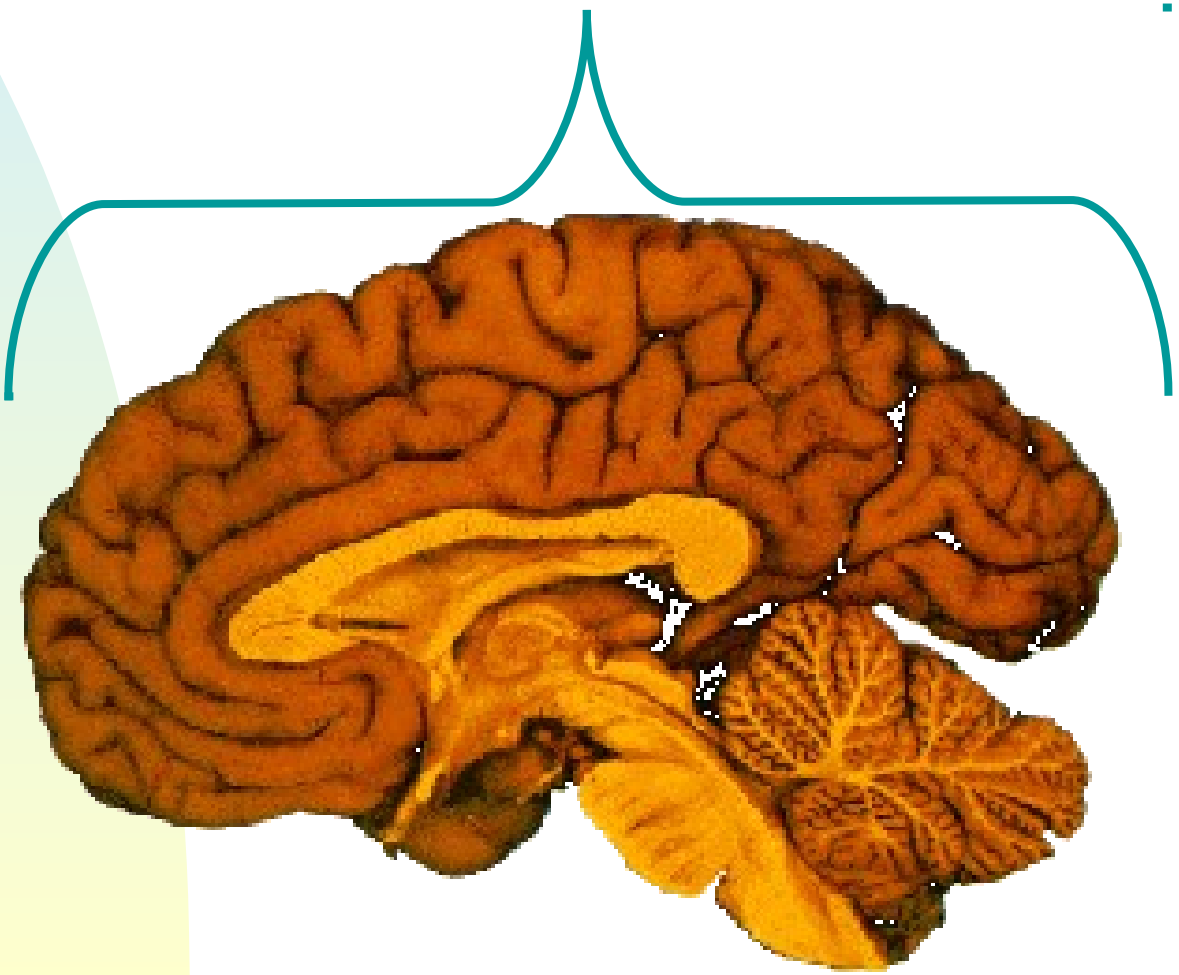
click audio

NEURO MENU

Cerebrum

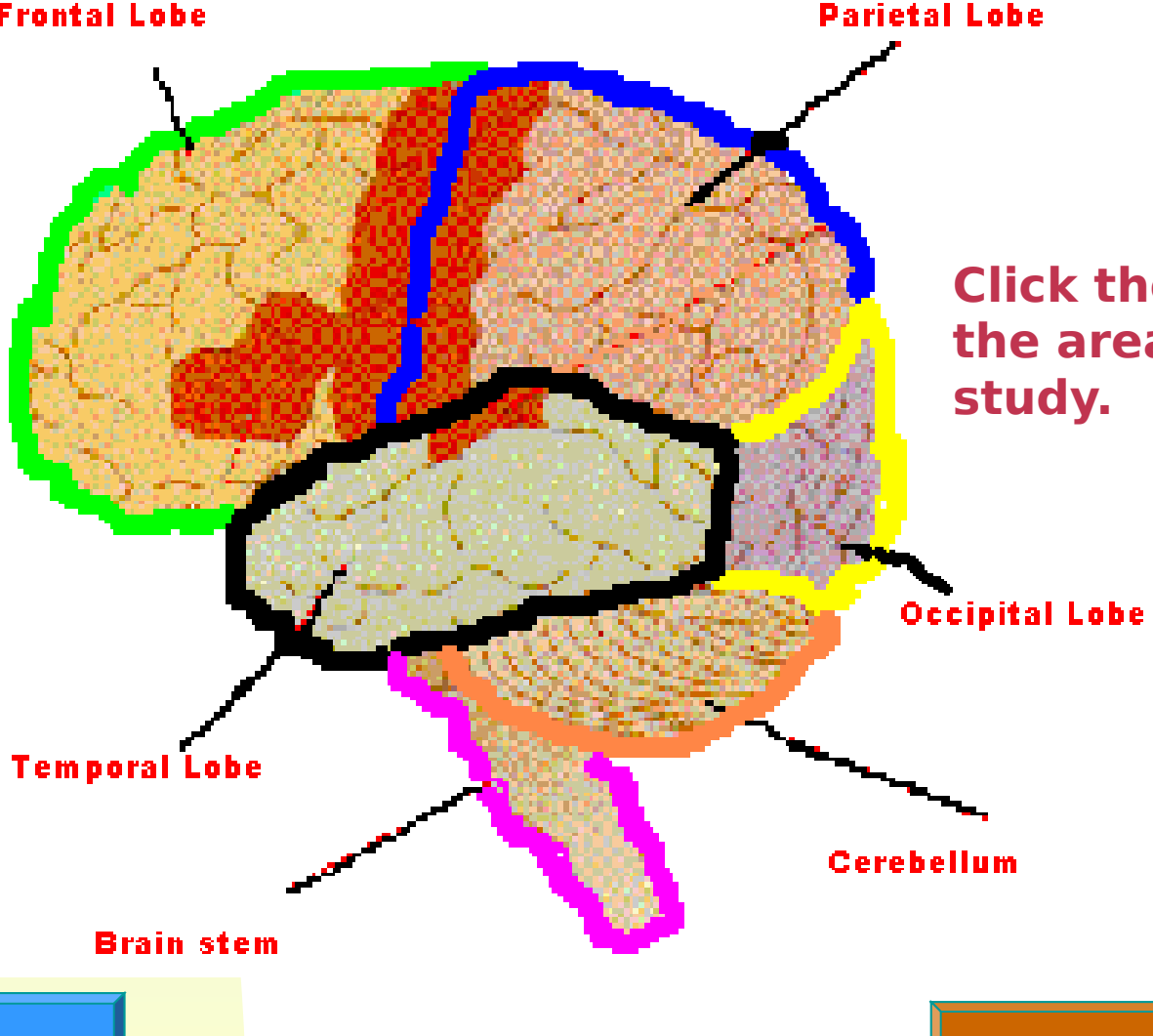
Located on the superior aspect of the brain.
Made up of gray matter which is unmyelinated.
The gray matter is called the cerebral cortex.

click audio



Area's of the Cerebrum

click audio



Click the name of the area you wish to study.

NEURO MENU

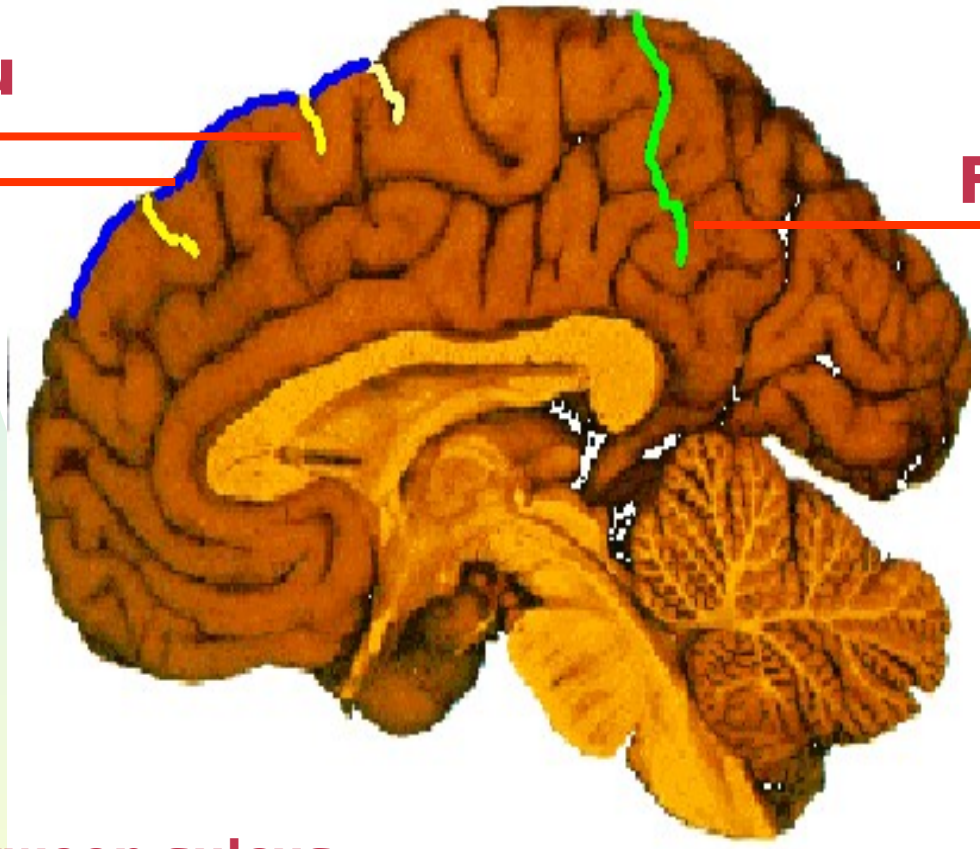
URFACE OF THE BRAI

Surface structures on brain

click audio

Sulcus

Gyrus



Fissure

Gyrus- ridges between sulcus

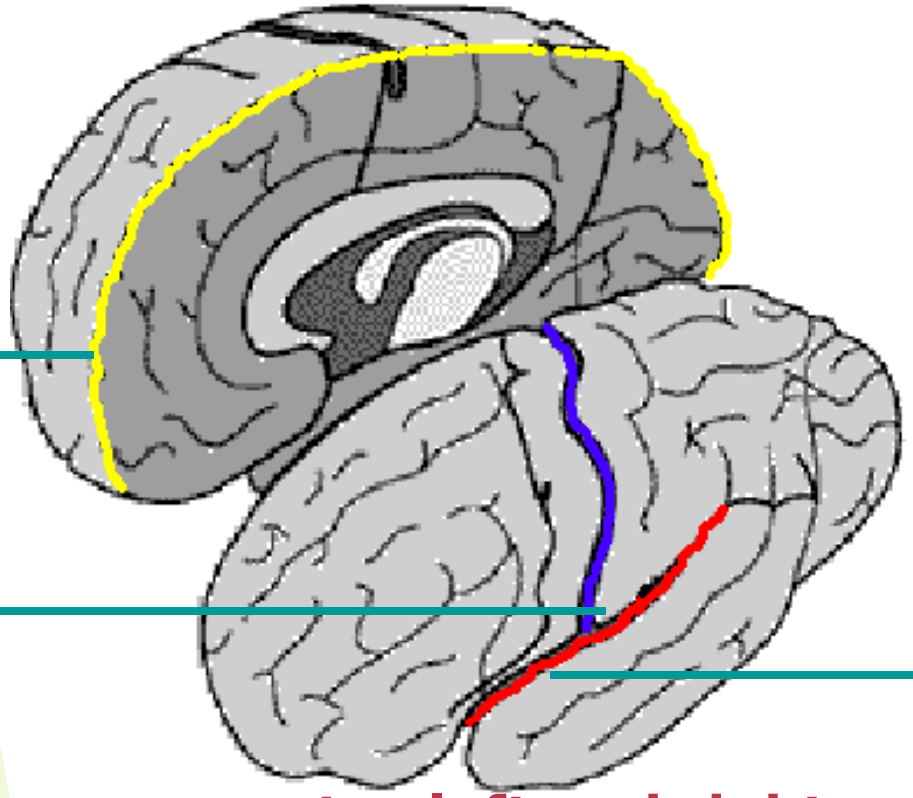
Sulcus- shallow indention's in brain.

Fissure - Deep grooves/indention's

PREVIOUS SLIDE

Main fissures

click audio



Longitudinal fissure - separates left and right hemispheres

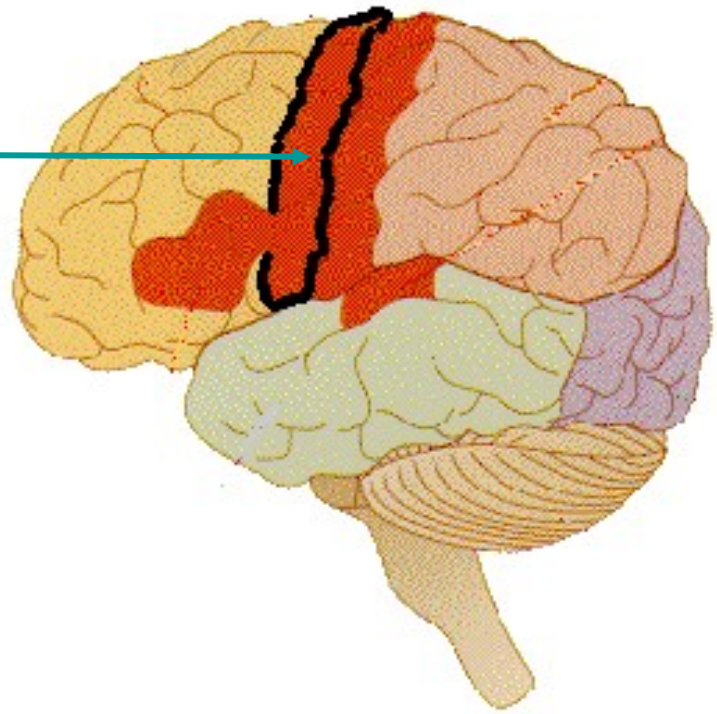
Central Sulcus - separates frontal lobe and parietal lobe

Lateral fissure - separates the temporal lobe

CEREBRUM DIAGRAM

Frontal Lobe

1.The precentral gyrus: Location, anterior central sulcus



***Primary motor area.**

***Skilled or learned movements like writing.**

2. Personality

3 Speech production

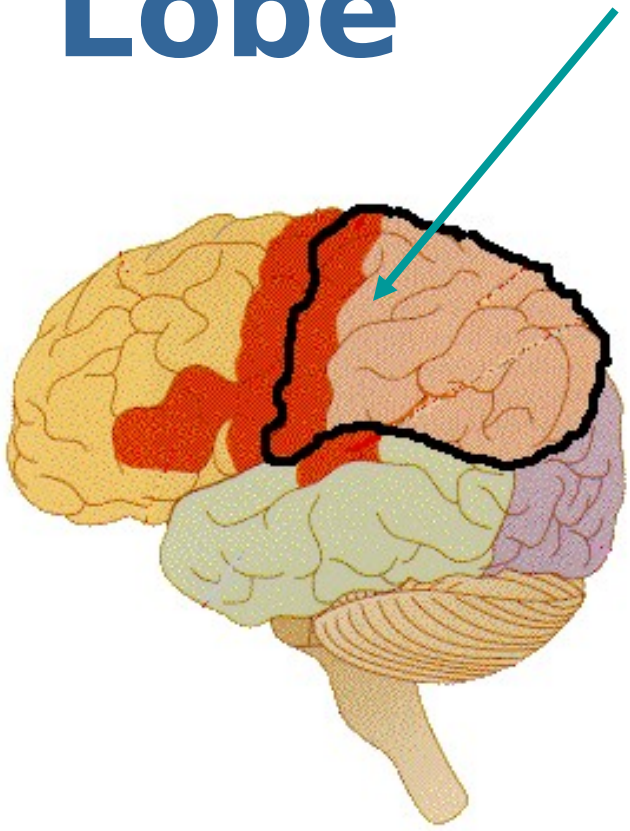
click

CEREBRUM DIAGRAM

Parietal Lobe

Postcentral gyrus: posterior to the central sulcus, and is the primary sensory area.

Location of the Angular gyrus-responsible for the recognition of the written word.



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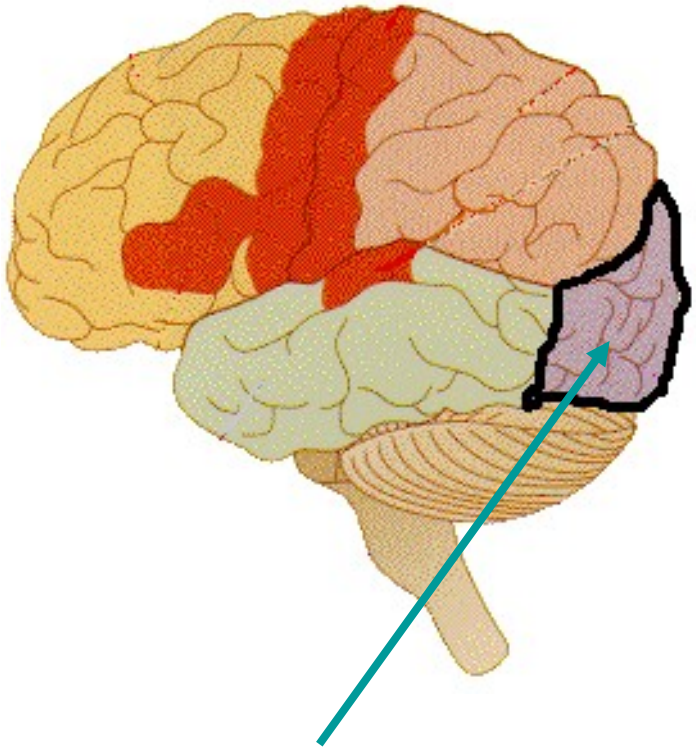
CEREBRUM DIAGRAM

Occipital Lobe

click audio

Posterior region of cerebrum.

Visual reception and perception.



CEREBRUM DIAGRAM

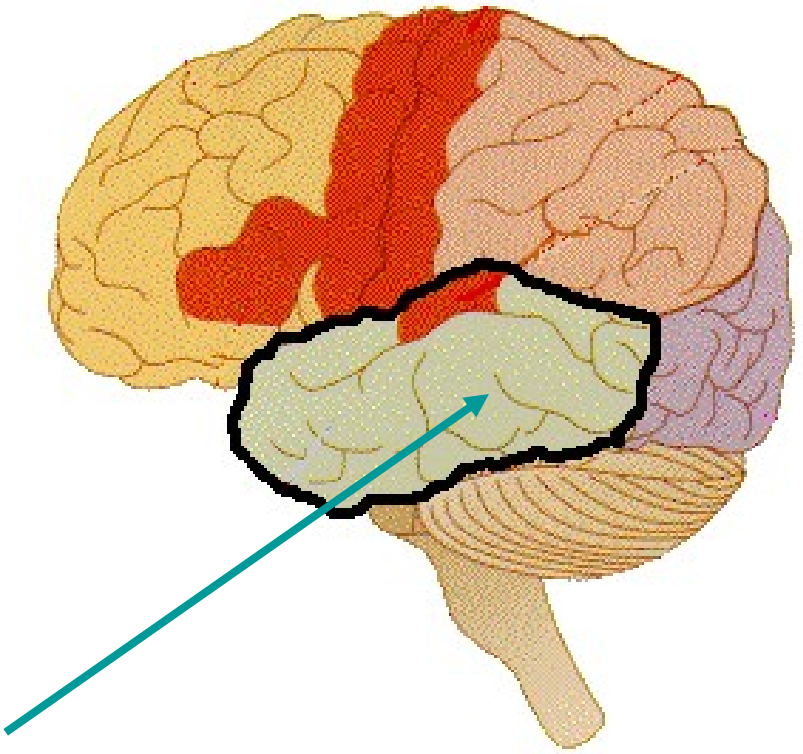
Temporal Lobe

click audio

Inferior to lateral fissure

Auditory perception

recognition of speech through the Wernickes area.



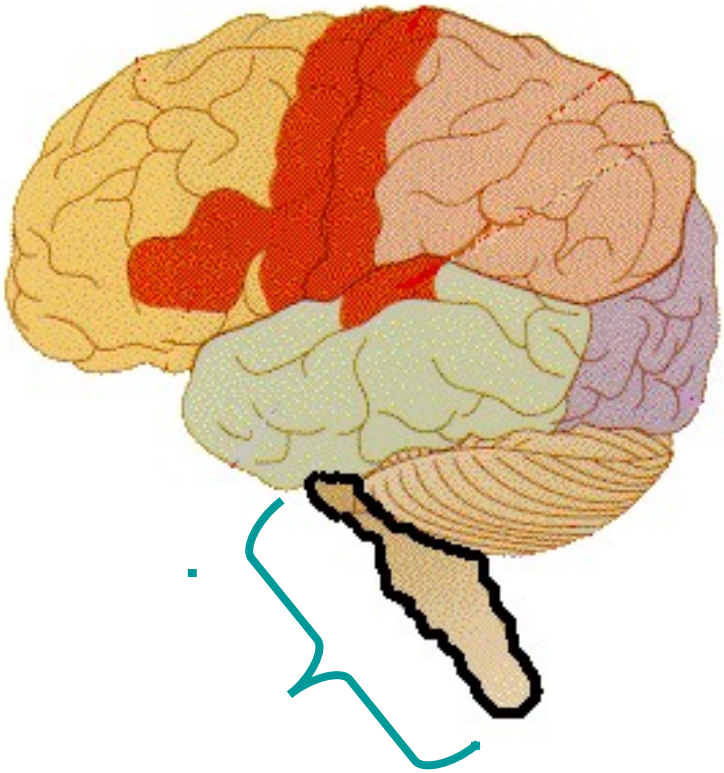
CEREBRUM DIAGRAM

Brain Stem

click audio

Made up of three structures:

1. Midbrain
2. Pons
3. Medulla Oblongata



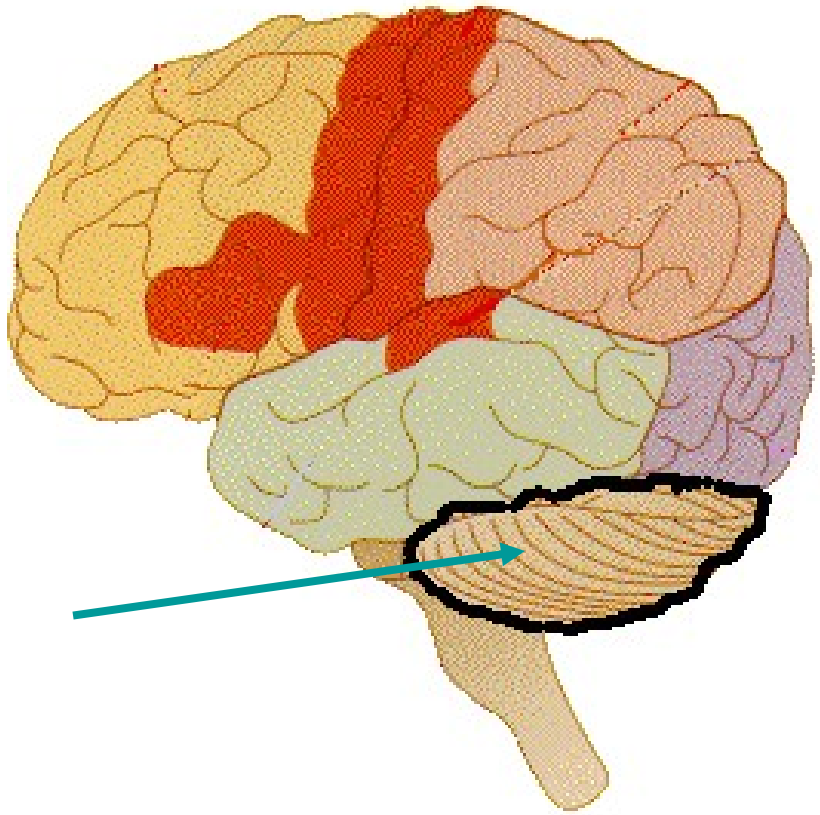
CEREBRUM DIAGRAM

Cerebellum

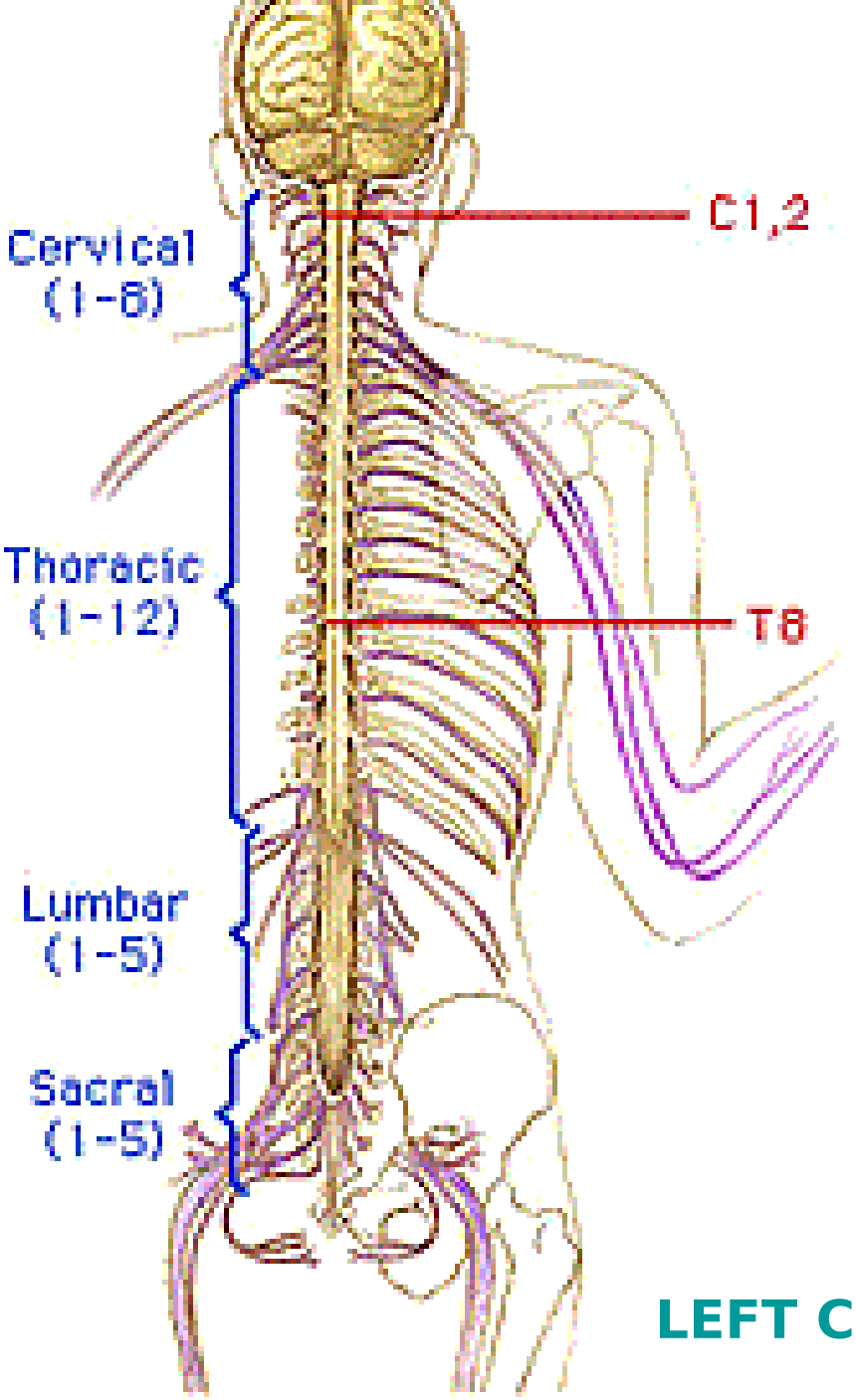
click audio

Responsible for equilibrium and balance.

Fine motor skills.



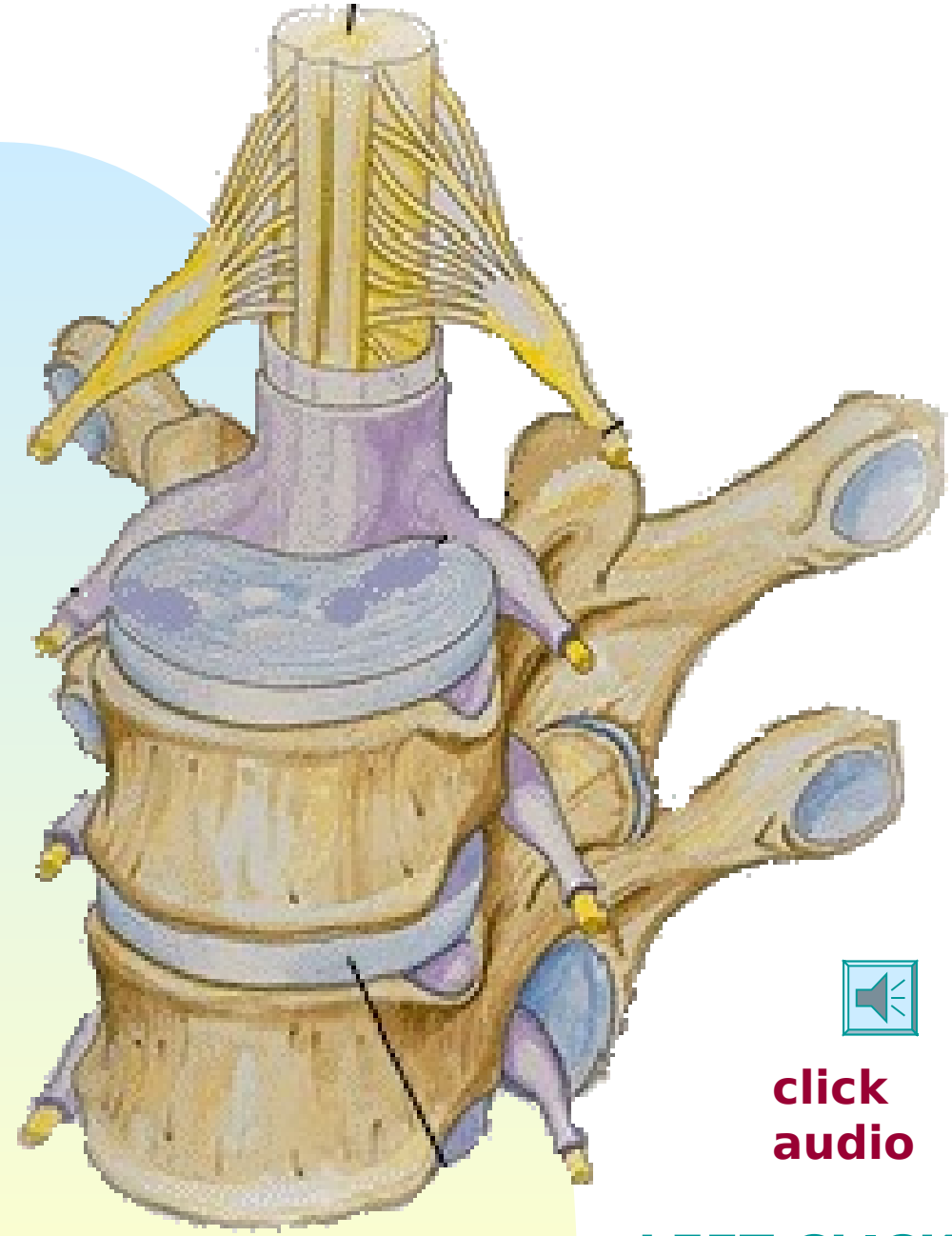
CEREBRUM DIAGRAM



We have discussed the different parts of the brain and what it does, now lets concentrate on the spine.

click audio

LEFT CLICK THE SCREEN TO CONTINUE.



The spinal cord goes from C1 to L2 vertebrae.

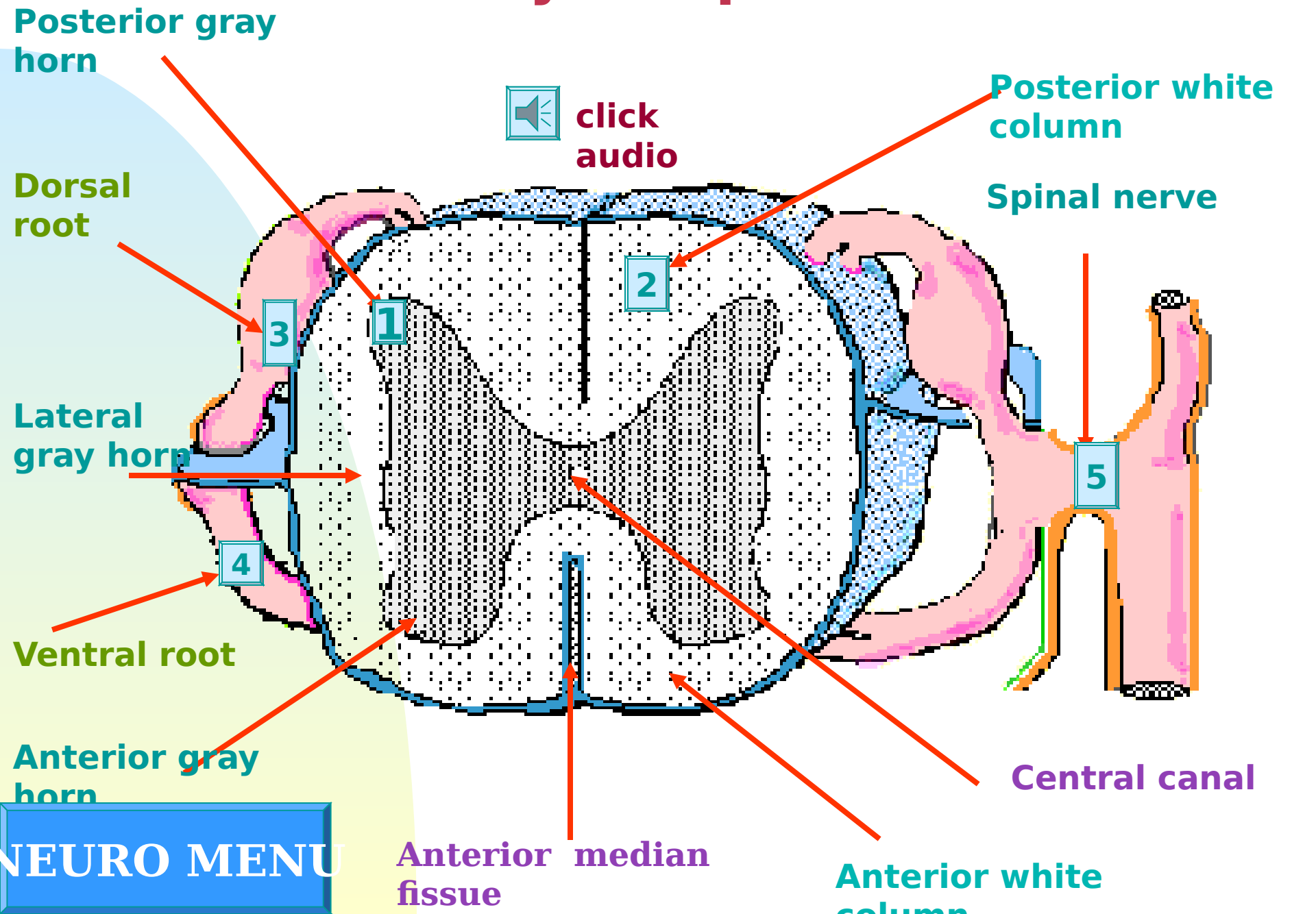
The meninges that surond the brain continue down along the spinal cord.

There are 31 pairs of spinal nerves that come off of the spinal column, and they are part of the peripheral nervous system.

click audio

LEFT CLICK THE SCREEN TO CONTINUE.

Anatomy of Spinal Cord



GRAY MATTER

Central region of the spinal cord

Contains the synapses and cell bodies of neurons

Different regions of gray matter

1. **Dorsal horn – Sensory**
2. **Ventral horn – Motor**
3. **Late[illegible]onomic neuron location**

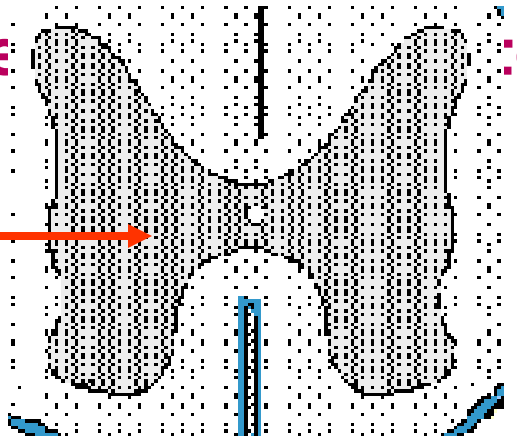


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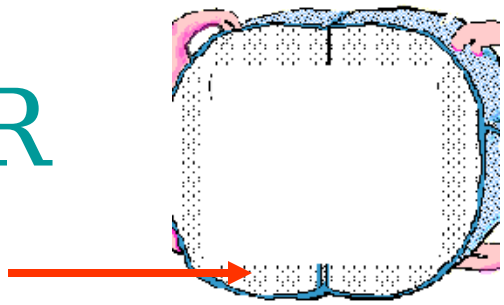
DIAGRAM

WHITE MATTER



Surrounds the gray matter

Contains myelinated axons carrying information from brain to the spinal cord (motor), and from spinal cord to brain (sensory)

Different regions of white matter

1. Lateral column – Sensory (pain, temp., crude touch and voluntary motor information)

2. Anterior column – Sensory (pain, temp., crude touch, and involuntary motor information)

3. Posterior column – Sensory (vibration, proprioception, and discrimination to touch)

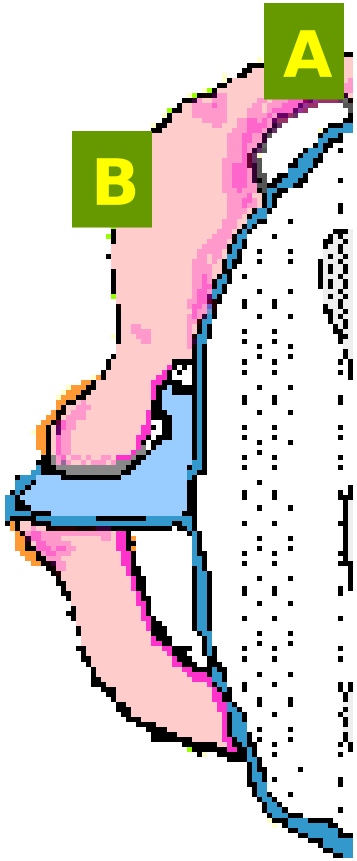
click audio

DIAGRAM

DORSAL (POSTERIOR) ROOT

A. Contains the axons of all afferent neurons, somatic and autonomic that are entering the spinal cord at that level.

B. Dorsal root ganglion is a swelling of the dorsal root that contains the cell bodies for the afferent neurons.

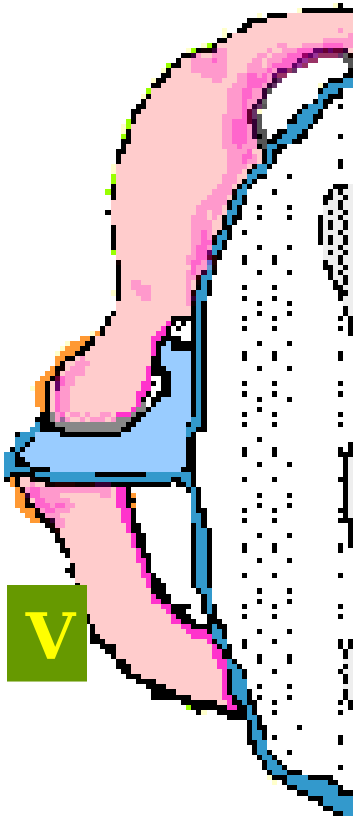


click audio

DIAGRAM

VENTRAL ROOT

Contains the axons of all efferent neurons, somatic and autonomic, that are exiting the spinal cord at that level



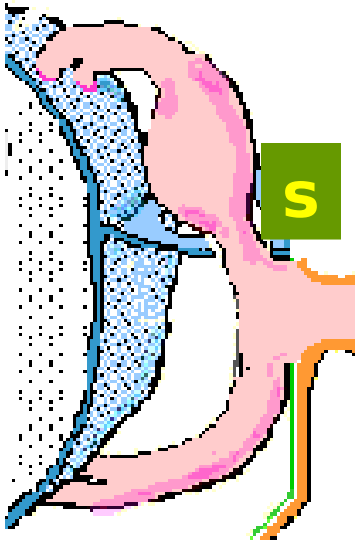
click audio

DIAGRAM

SPINAL NERVE

click audio

Formed by the union of the dorsal roots and ventral roots as they go through the intervertebral foramen.

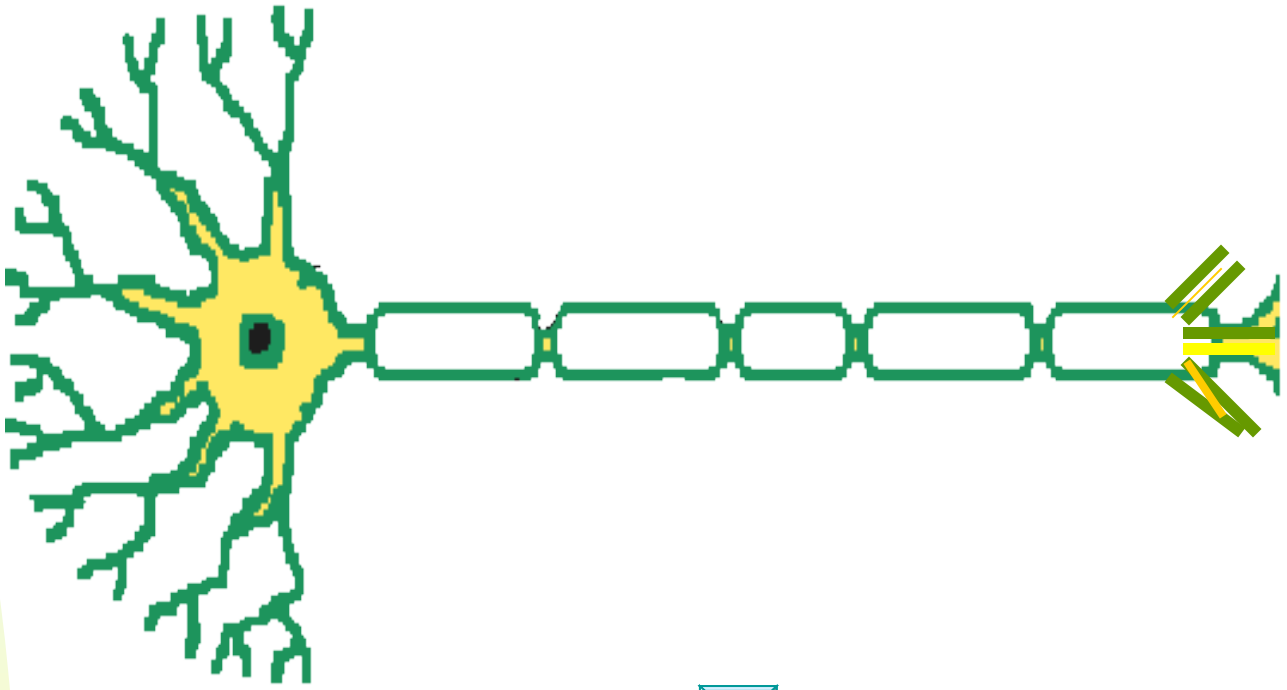


DIAGRAM

Neuron Cell

The neuron cell is a functional unit of the nervous system.

Responds to nerve impulses of other neurons by initiating and transmitting one or more impulse.

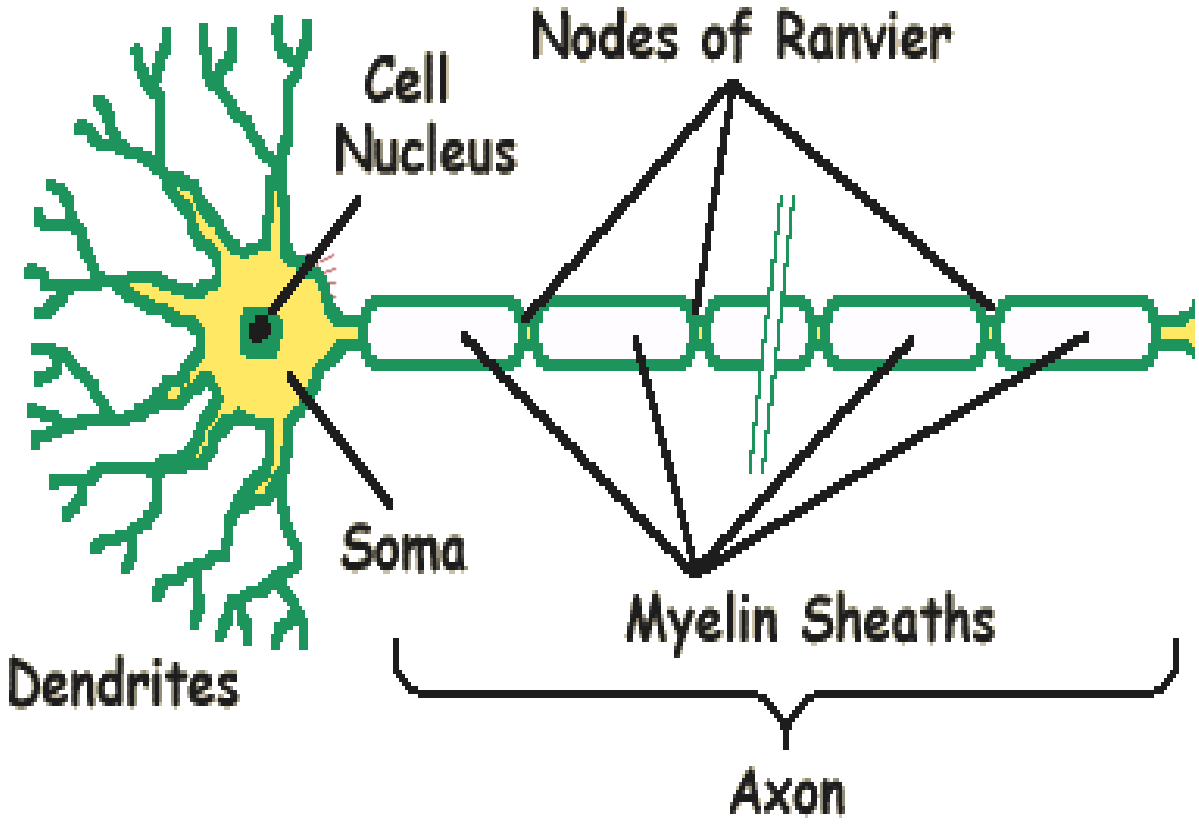


click audio

LEFT CLICK THE SCREEN TO CONTINUE.

NEURON PARTS REVIEW

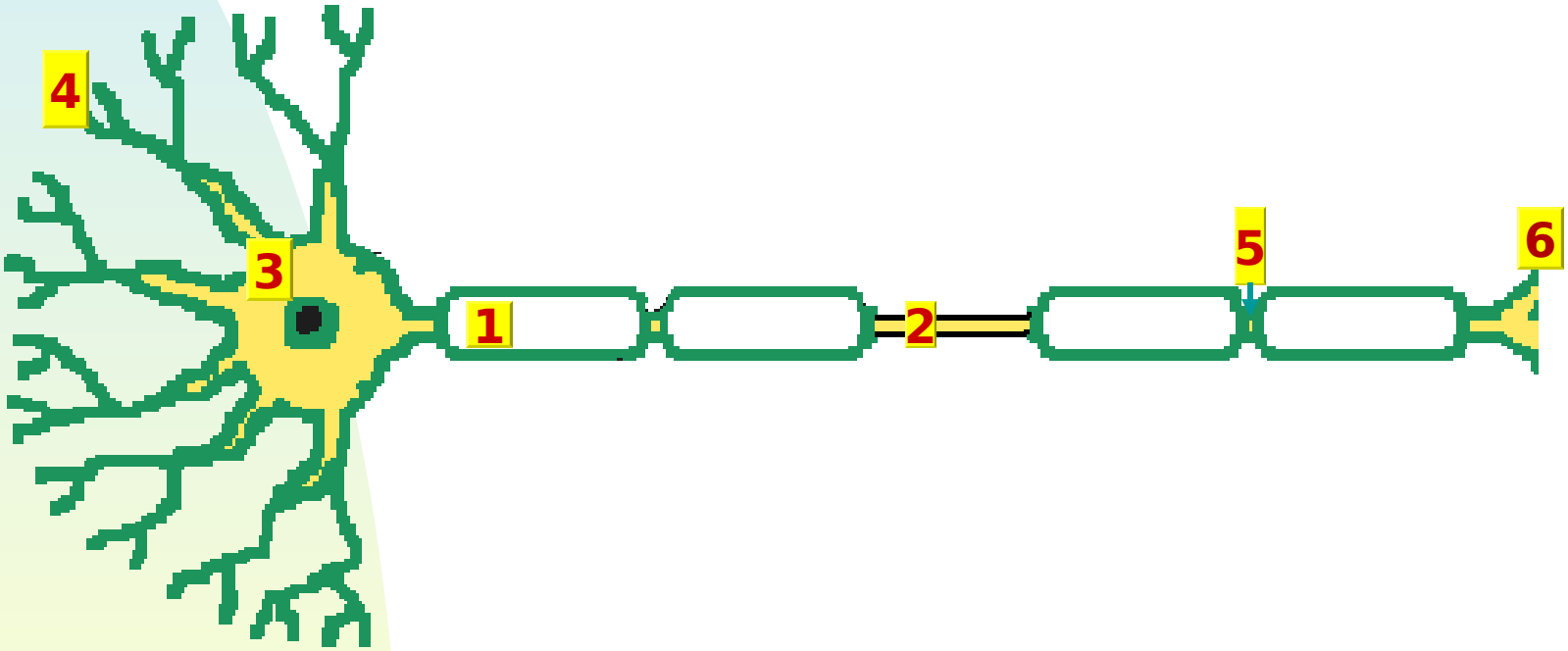
click audio



LEFT CLICK THE SCREEN TO CONTINUE.

Parts of the Neuron

click audio



Select the number for the area you wish to study.

NEURO MENU

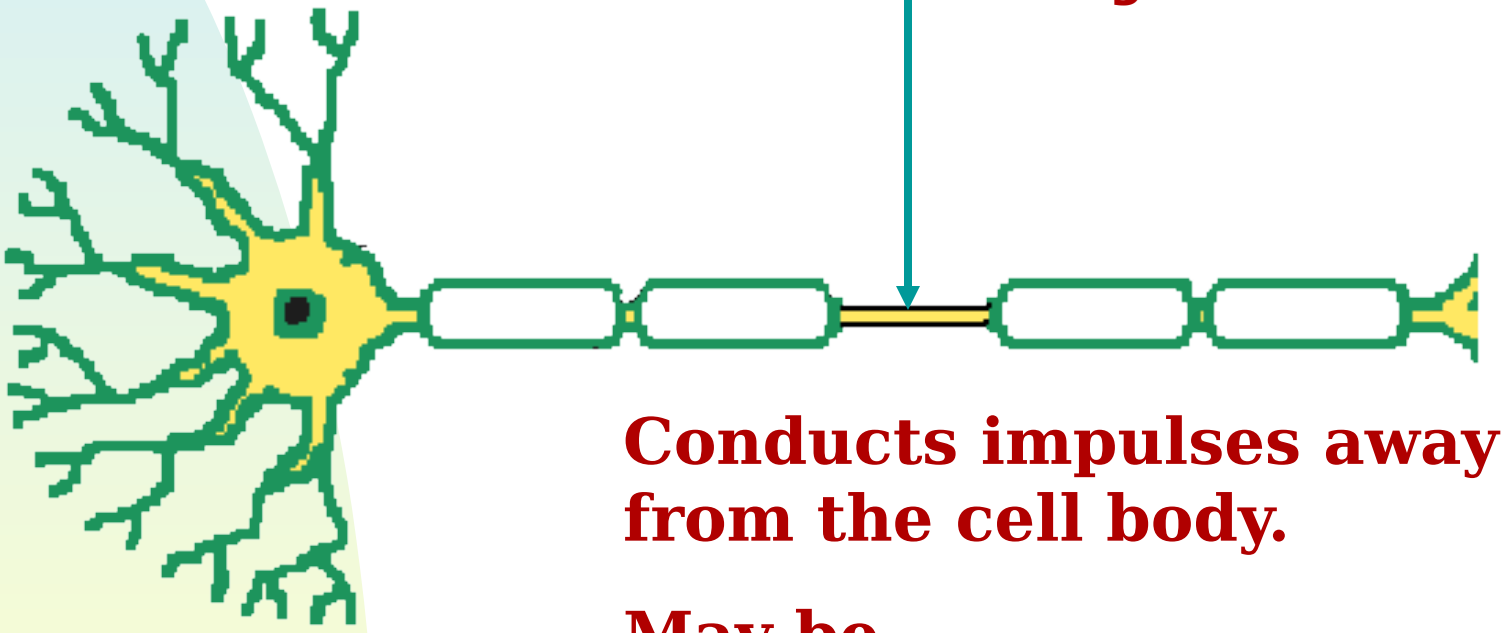
QUIZ

AXON

click audio

Surrounded by the axolemma.

May be as long as a meter in length



Conducts impulses away from the cell body.

May be myelinated/unmvelinated

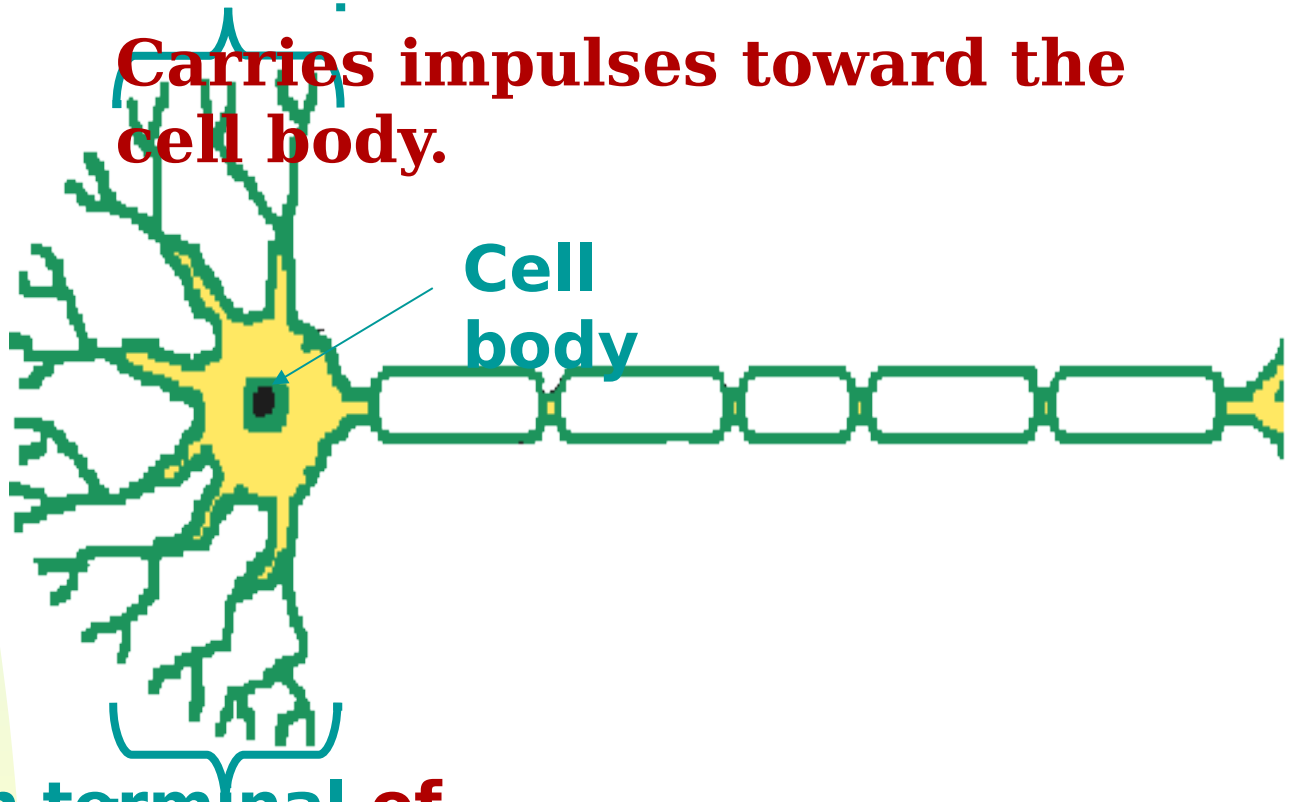
REVIEW

DENDRITES

click audio

Highly branched cytoplasmic extensions.

Carries impulses toward the cell body.

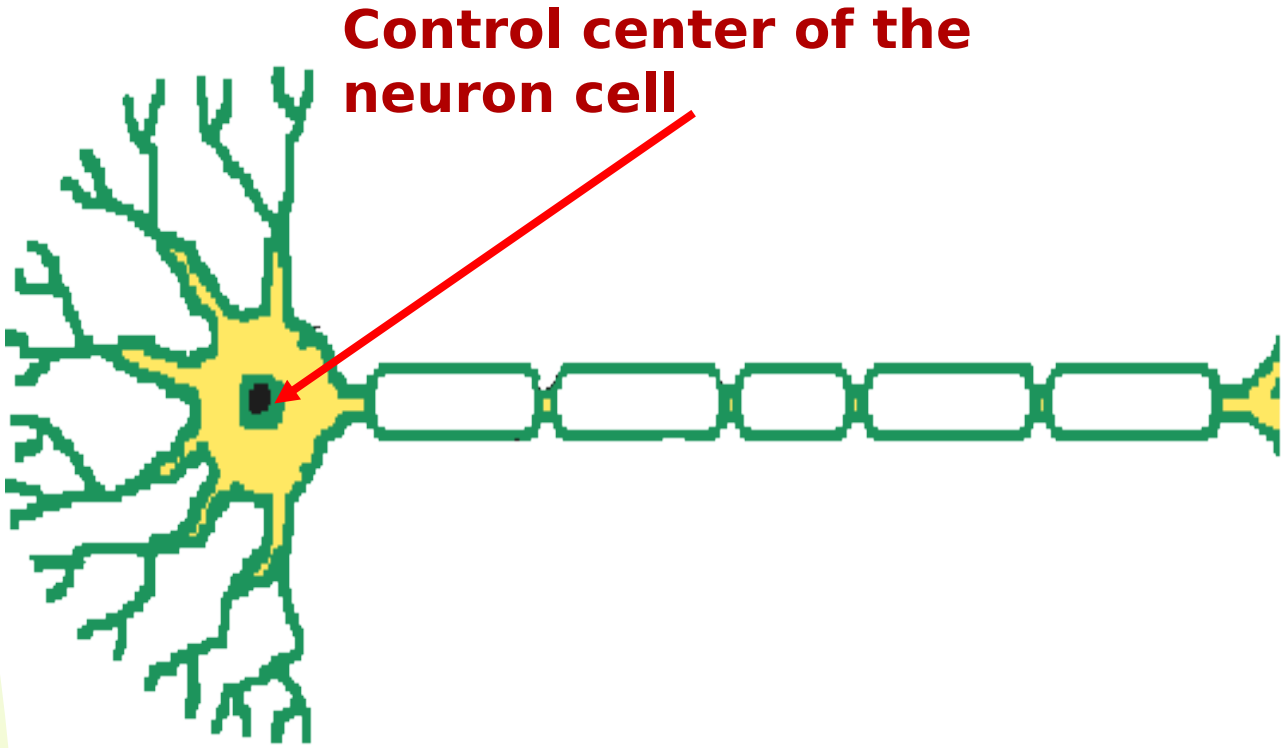


Site where axon terminal of one axon meets dendrites of second axon to transfer

REVIEW

click audio

CELL NUCLEUS

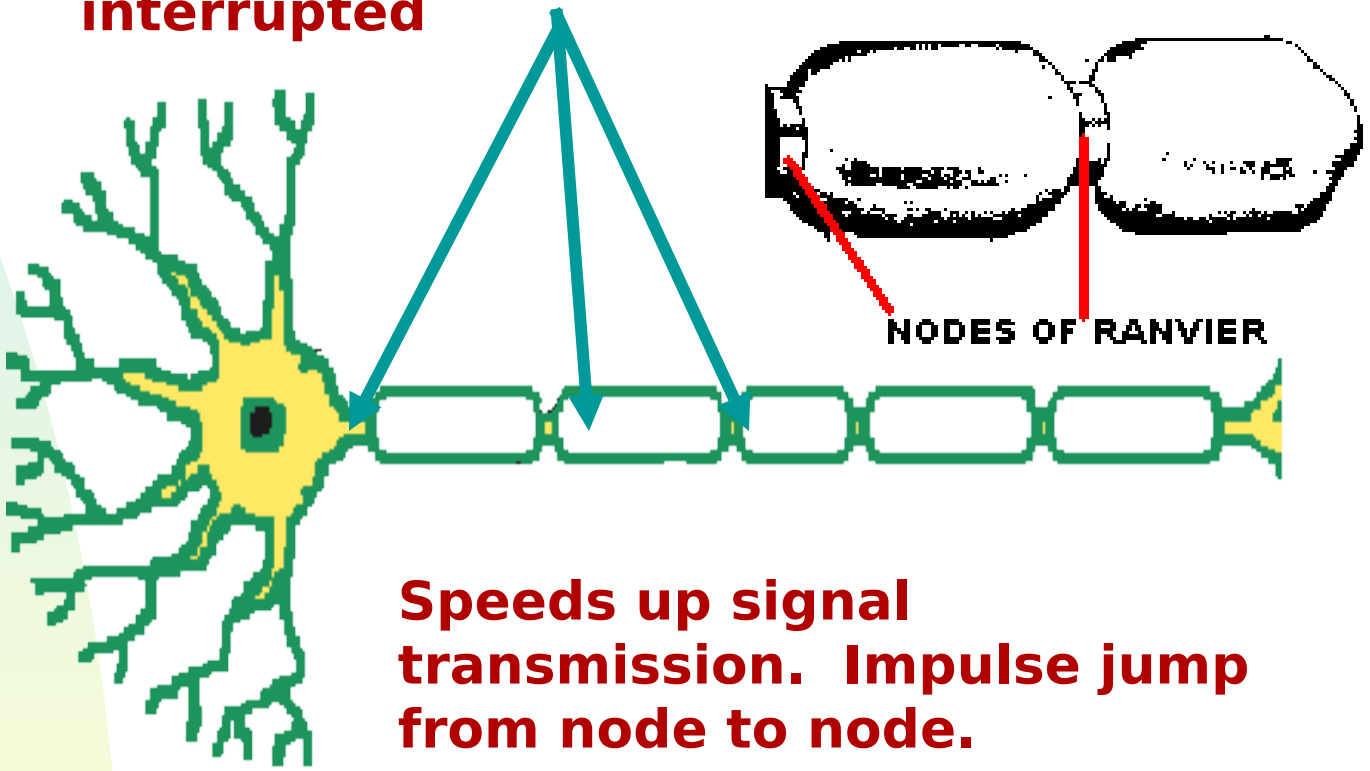


REVIEW

NODES OF RANVIER

click audio

Gap where myelin sheath is interrupted

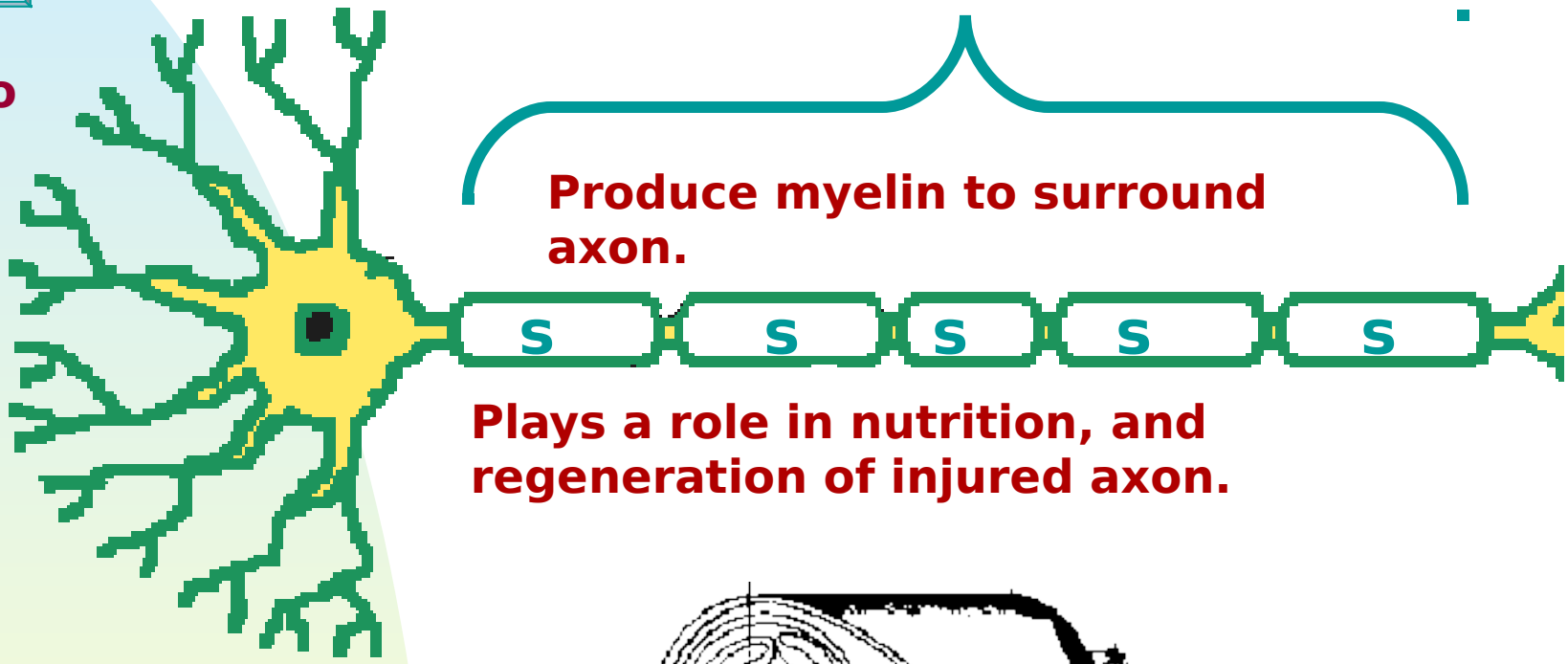


Speeds up signal transmission. Impulse jump from node to node.

REVIEW

SHEATH OF SCHWANN CELLS

click audio



Produce myelin to surround axon.

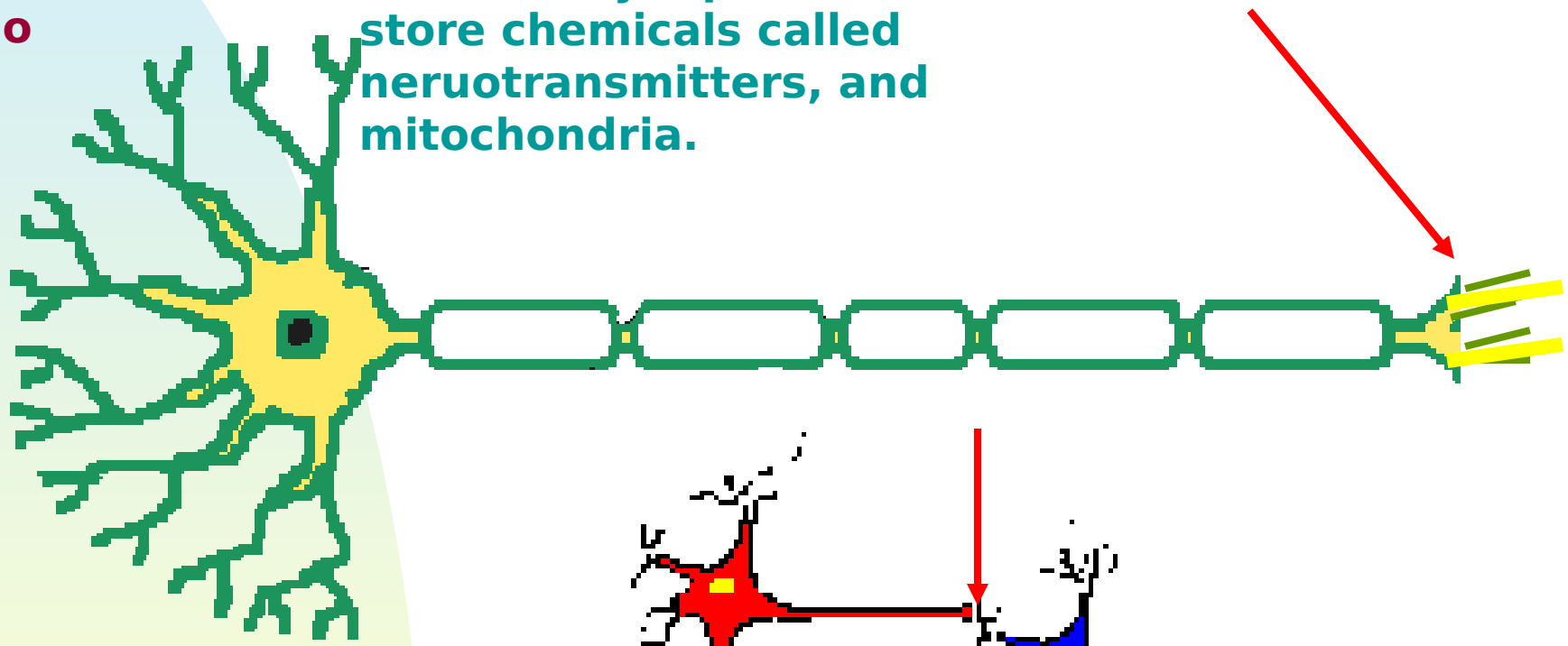
Plays a role in nutrition, and regeneration of injured axon.

REVIEW

Axon Terminal

click audio

Contains synaptic vesicles that store chemicals called neruotransmitters, and mitochondria.

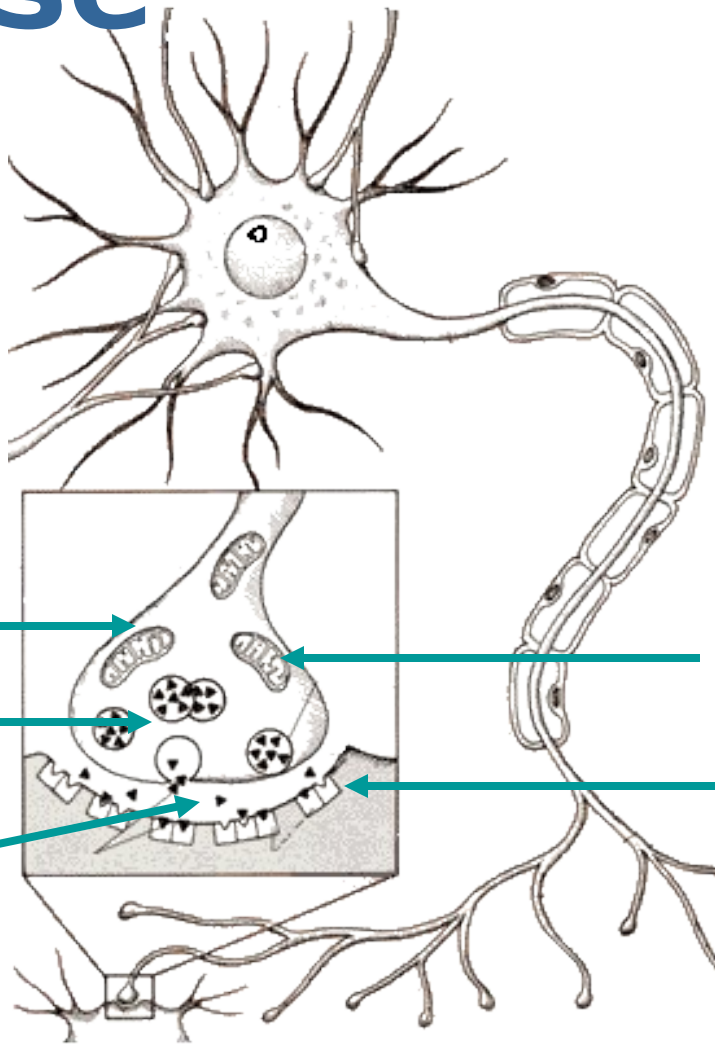


When chemicals are released they change the activity of a muscle fiber, gland or another neuron.

Click here: SYNAPSE

Synapse

click audio



Presynaptic terminal

Transmitter vesicles

Synaptic cleft

Mitochondria

Postsynaptic terminal

Junction between where a axon terminal of one neuron ends, to the dendrites of a second neuron. Site where transmission occurs.

REVIEW

QUESTION 1

click audio

Which part of the neuron cell provides nutrients to the axon?

DENDRITES

SCHWANN CELLS

AXON TERMINAL

QUESTION 2

click audio

Where are the neurotransmitters located?

AXON TERMINAL

DENDRITES

Nodes of Ranvier

QUESTION 3

click audio

What is the name of the gap where the myelin sheath is interrupted?

CELL BODY

NODES OF RANVIER

AXON

QUESTION 4

click audio

Where is the control center of the neuron located?

SOMA

AXON

CELL NUCLEUS

QUESTION 5

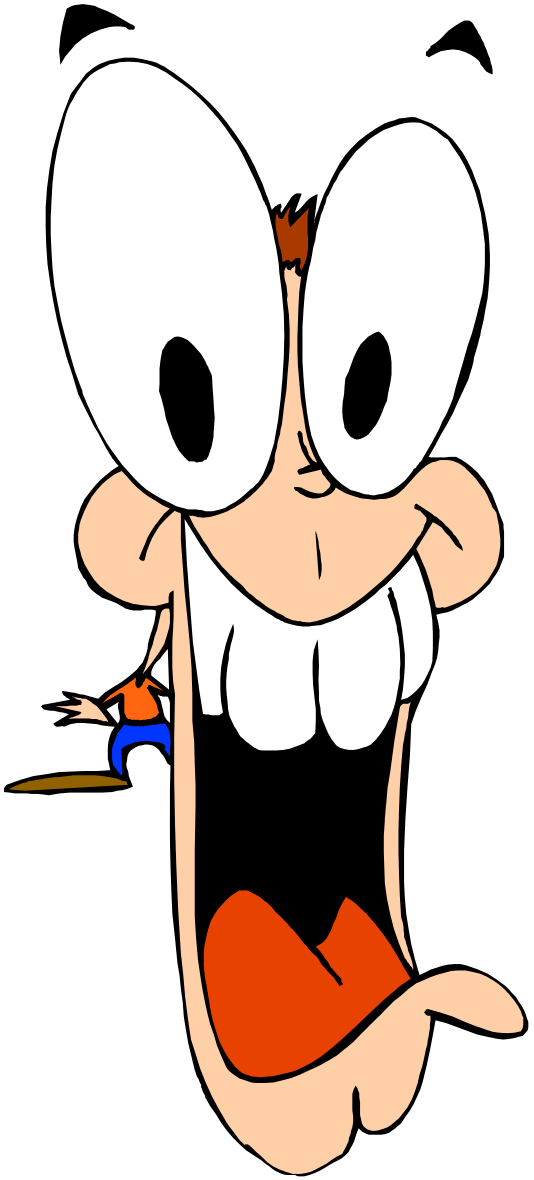
click audio

What carries messages to the cell body?

DENDRITES

AXON

SOMA



SUPER!!

NEURON

MEDICAL LECTURES

- NOTE WRITING
- SEVEN STEP ASSESSMENT

LEFT CLICK THE SCREEN TO CONTINUE.

NEW STYLE NOTE WRITING

- The SOAP note is the Old style of writing.

- The new is as follows:

  - EXAMINATION
  - ASSESSMENT
  - PROGNOSIS
  - INTERVENTION
  - DIRECT INTERVENTION

LEFT CLICK THE SCREEN TO CONTINUE.

INITIAL NOTE

EXAMINATION

ASSESSMENT

PROGNOSIS

INTERVENTION

DIRECT INTERVENTION

MAIN DIRECTORY

EXAMINTATION: History

- Age, sex, race, and occupation
- All test results (labs, x-rays….)
- Complaints
- Date of onset
- Mechanism of injury
- Signs & Symptoms (pertaining to the problem)

LEFT CLICK THE SCREEN TO CONTINUE.

EXAMINATION: Test & Measures

- Observations of movement patterns
- Signs and Symptoms (Generally visualization & palpations)
- Test and Measurements (Seven step assessment) includes special tests

NOTE MENU

ASSESSMENT

- List: Problems and positive symptoms and tests
- Your assessment of problem (Symptoms consistent with ….)
- How patient tolerated the exam

NOTE MENU

PROGNOSIS

- Realistic expectations with treatments
- Measurable time frames.
- Patient goals (Self determined)
- Estimation of treatment requirements
  - Short time goals 1-4 weeks
  - Long term goals < 4 weeks

NOTE MENU

INTERVENTIONS

- Coordination and communication with all necessary health care providers.
- Include patient and or family education

NOTE MENU

DIRECT INTERVENTIONS

- Type of treatments ordered
- Location of treatments
- Frequency of treatments
- Patient instructions
- Follow-up plans
- Discharge plans

NOTE MENU

OT PROCEDURES

FLUIDOTHERAPY TREATMENTS

HOT PACK TREATMENTS

CRYOTHERAPY TREATMENTS

PARAFFIN BATH TREATMENTS

MAIN DIRECTORY

HOT PACK SUPPLIES

Hot packs – Vary in size and are silicon filled canvas covers.

Hot pack covers – are in 3 general sizes: cervical, standard and large.

Hydroculators @ 165-170˚F

LEFT CLICK THE SCREEN TO CONTINUE.

TREATMENT USES

Indications

- Reduce pain and stiffness
- Alleviate muscle spasms
- Increased range of motion
- Improve tissue healing

Contraindications

- Impaired circulation and/or nerve function
- Bleeding or hemorrhage impairments
- Significant edema (heat)
- Malignancies (heat)

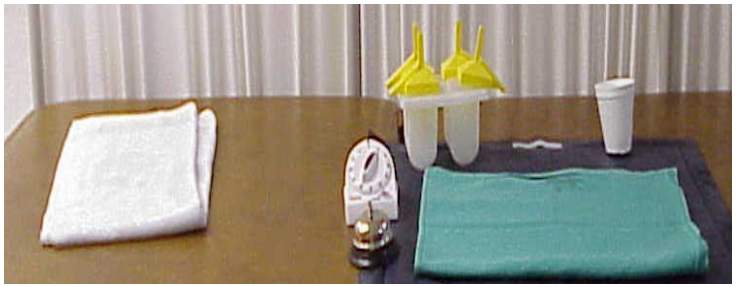
Back pain patient

OT PROCEDURES

CRYOTHERAPY SUPPLIES

Commercial cold pack

Ice Massage items and towels



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Treatment Uses

Acute injuries are usually treated with ice to decrease symptoms of injury.

Decreases pain and swelling

REHABILITATION

SPLINTING

CONTINUOUS PASSIVE MOTION MACHINES (CP

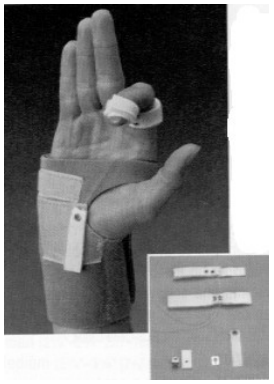
EXERCISE TOOLS

WHEEL CHAIRS

MAIN DIRECTORY

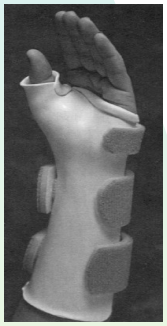
SPLINTS

Wrist Support Splint

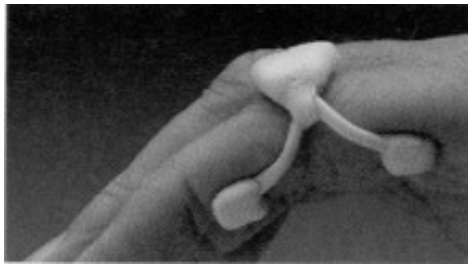


Static Progressive P

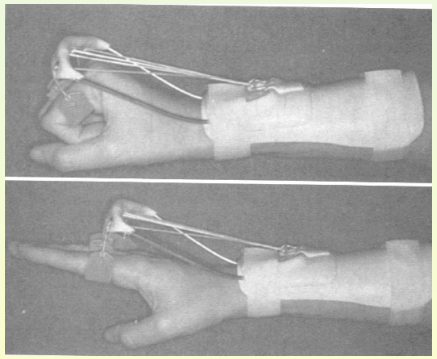
Flexion Splint



Thumb Spica Splint



Dynamic PIP Extension Splint



Dynamic Finger Extension Splint

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Types of Hand Splints:

1. Static
   a. No moving parts
   b. Holds the extremity in one place to prevent movement
2. Dynamic
   a. Has moving parts (i.e., rubber bands, outriggers, traction)
   b. Encourages movement (i.e., to prevent joint
3. Static Progressive
   a. Can either be similar to dynamic splint (moving parts with outriggers) or serially applied static splints.
   b. Applies consistent static force to a joint for an extended period of time.

LEFT CLICK THE SCREEN TO CONTINUE.

Specific Examples of Diagnoses and Matching Splints:

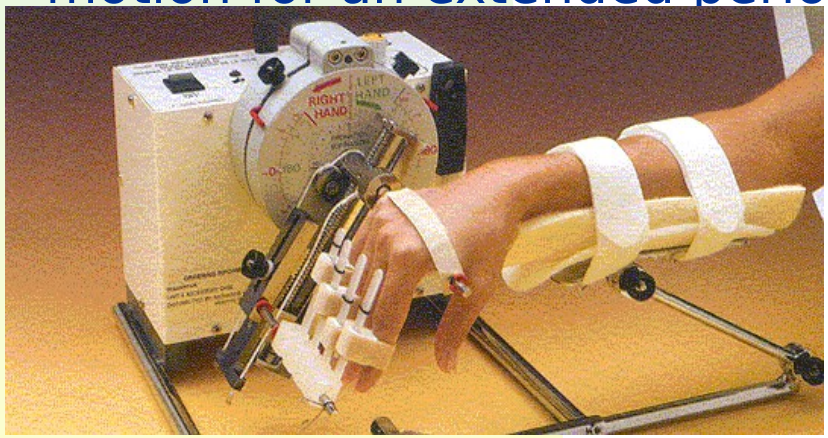
- Carpal Tunnel Syndrome — Wrist Support Splint
- Lateral Epicondylitis — Tennis Elbow Brace (and wrist support splint)
- Ganglion Cyst (at the wrist) — Wrist Cock-up Splint
- DeQuervain's Syndrome — Thumb Spica Splint
- Skier's Thumb (ruptured UCL) — Thumb Spica Splint
- Mallet Finger — Stax Splint
- Boutonniere Deformity — PIPJ Extension Splint or Joint Jack
- Swan Neck Deformity — Figure Eight Splint or "Ring" Splints
- Ulnar Drift of MCPJs — Ulnar Drift Splint

LEFT CLICK THE SCREEN TO CONTINUE.

CONTINUOUS PASSIVE MOTION MACHINE

- By using a motorized device to very gradually move the joint, it is possible to significantly accelerate recovery time by decreasing soft tissue stiffness,increasing range of motion, promoting healing of joint surfaces and soft tissue, and preventing the development of motion-limiting adhesions (scar tissue).

- This is accomplished without patient effort (passively) as the machine moves a joint through a defined (prescribed) range of motion for an extended period of time.



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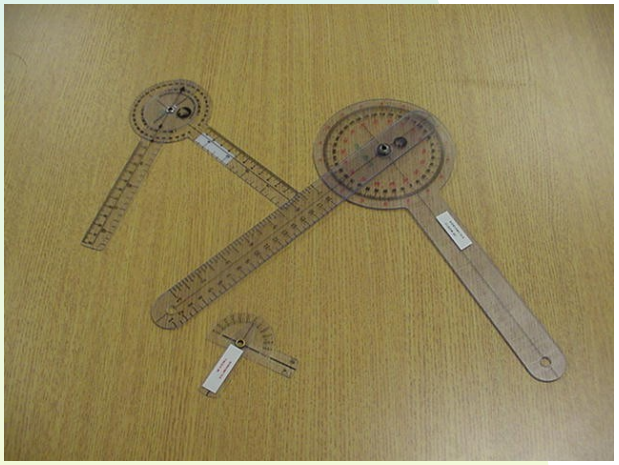
GONIOMETRY

The science of measuring angles. The system of measuring the range of motion (ROM) of joints in the human body.

Goniometer:
The instrument used to measure the ROM of a joint.



Purpose

Active Range of Motion (AROM):
Movement of a joint as a result of a muscle contraction only. There is *no* assistance from other sources to obtain the motion.

Passive Range of Motion (PROM):
Movement of a joint which is produced from an outside source (ie: another person, opposite limb, mechanical device, etc.).

Total Active Motion (TAM): The sum of angles formed through active motion by a joint or a series of joints.

Total Passive Motion (TPM): The sum of angles formed through passive motion

LEFT CLICK THE SCREEN TO CONTINUE.

Wheel Chairs

Used when patient cannot ambulate safely with walker/crutches/long distance.

Patients who have some type of paralysis

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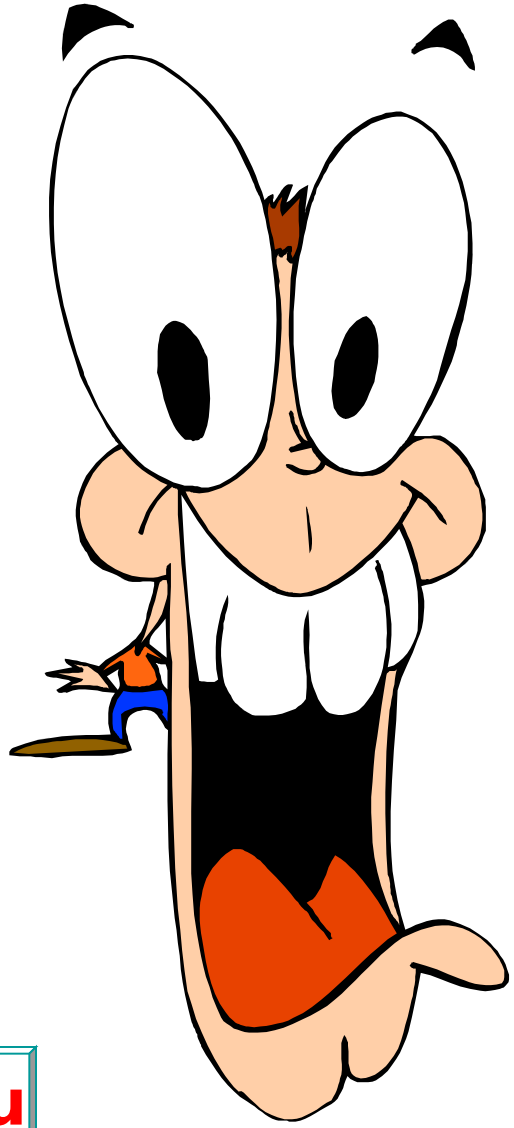
Super Job!!



Knowledge Menu

Exit the Program

Fantastic!!

Knowledge Menu

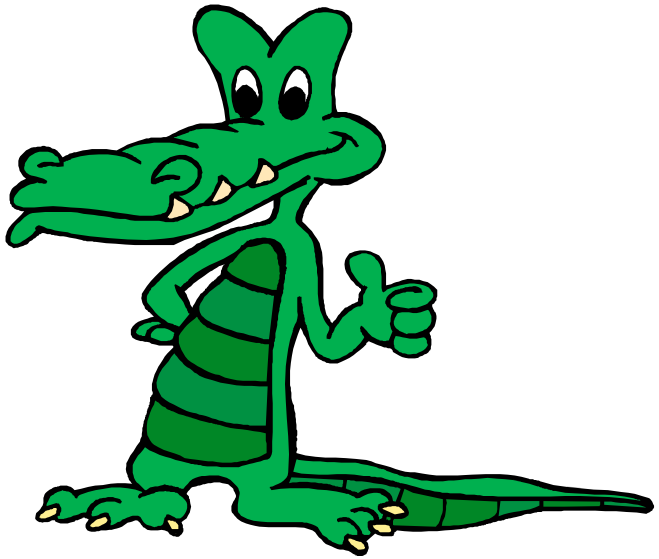
Exit the Program

Excellent!!

Knowledge Menu

Exit the Program

Great Job!!



Knowledge Menu

Exit the Program

Awesome!!

Knowledge Menu

Exit the Program

FLUIDOTHERAPY

Procedures

- Check electrical connections and grounding of machine

- Pre heat unit to 105 ^{o} - 118 ^{o} F

- Patient removes jewelry and washes hands.

- Insert the patient's extremity into the machine through the canvas sleeve and secure the top of the sleeve with Velcro® fasteners. (**Note:** This modality is not for use with open wounds)

Adjust airflow to the patient's tolerance or therapist directed specifications.

- Treatment time – 20 min

- If not contraindicated by therapist's directive, encourage patient to actively exercise extremity during treatment.

OT PROCEDURES

PARAFFIN BATH

Procedures

Patient removes jewelry and washes hands

Therapist assures that temp is between 118-130º

Briefly dip the patient's extremity in the paraffin bath 8-10 times, then cover with plastic bag and then wrap with a towel.

Alternate method: Dip extremity several times and then leave immersed for duration of the treatment.

Treatment time is be nutes.

SPLINT

Small, lightweight device, usually made of plastic material and worn for a short time as part of a treatment program. Splints are usually made by therapists

Types of Hand Splints:

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